

## Hyperledger Annual TSC Election, 2018-2019

### Candidates (listed alphabetically by first name)

1. Arnaud Le Hors (IBM)
2. Axe Tang (Independent)
3. Baohua Yang (Oracle)
4. Binh Nguyen (State Street)
5. Bob Summerwill (Quantfury)
6. Christopher Ferris (IBM)
7. Chris Spanton (T-Mobile)
8. Claudio Lima (Blockchain Engineering Council)
9. Clive Boulton (Independent)
10. Dan Middleton (Intel)
11. Greg Haskins (State Street)
12. Hart Montgomery (Fujitsu)
13. Jonathan Levi (HACERA)
14. Kelly Olson (Intel)
15. Leon Liang (SANLIAN Technology)
16. Mark Wagner (Red Hat)
17. Mic Bowman (Intel)
18. Mostafa S. Joo (Finterra)
19. Mukhutdinov Bualt (Soramitsu)
20. Nathan George (Sovrin Foundation)
21. Nikolai Iushkevich (Soramitsu)
22. Shawn Amundson (Bitwise IO)
23. Silas Davis (Monax)
24. Sjur Nijssen (Independent)
25. Srinivasan "Murali" Muralidharan (State Street)
26. Stanislav Liberman (CME)
27. Steve Boyd (Ontario provincial government in Canada)
28. Todd Little (Oracle)
29. Troy Ronda (SecureKey)

## **Arnaud Le Hors (IBM)**

I am Senior Technical Staff Member (STSM) Web & Blockchain Open Technologies at IBM. I have been working on Open Technologies for over 20 years, involving standards and open source development.

I was a staff member of the W3C and the X Consortium and have represented IBM in several standards and open source organizations for many years. I have been involved in every aspect of the Open Technologies development process. This includes the technical, strategic, political, and legal aspects. I was editor of several key Web specifications including HTML and DOM and have chaired several W3C Working Groups for which I earned a solid reputation. I was involved in high profile open source projects such as Xerces, the Apache XML parser, and the X Window System. I made my first steps in Open Source in 1990 with the release of the XPM library which is still in use today!

I am currently the main representative for IBM at W3C, a contributor to Hyperledger Fabric, and an invited expert to the EU Blockchain Observatory & Forum where I make sure that the Hyperledger technologies are taken into account. I am a member of the Hyperledger Speakers Bureau and a Hyperledger Technical Ambassador. I very often speak about Hyperledger and its different projects at international conferences and meetups around the world.

As an active member of the TSC I have contributed to the project in several ways, leading the development of the Code of Conduct, Project Lifecycle, and Project Exit Criteria, and more recently the Hyperledger Labs for which I now serve as a steward.

It has been an honor to serve on the TSC and I hope to be able to continue in that role so that, drawing from my rich background in Open Technologies, I can keep contributing towards the growth and success of the Hyperledger Project.

My goal for the Hyperledger Project remains to not merely be successful technically but also be successful as a true Open Source project with an active, vibrant, and diverse community.

## **Axe Tang (Independent)**

Axe Tang was born in Shaanxi, China, in 1972. He received the Ph.D. degree in Mechanical Manufacturing and Automation from the Dalian University of Institute, Dalian, China, in 1999.

In 1999, he joined the Huawei Technologies Co. Ltd. As the chief programmer and project manager, he defeated Nokia, Ericsson, LogicaCMG and won the first opportunity to build Multimedia messaging platform for China Mobile, and he became one of the founders of MMS in China. In October 2010, he was appointed as the Director of Huawei Software Solution BU in Western Europe Region. During the four years in Düsseldorf, Germany, he got the first contact with Bitcoin and started to learn Blockchain Technology.

In September 2014, he moved to Johannesburg, South Africa as the head of Huawei Software BU in Eastern & Southern Africa Region. In August 2016, he moved back to Nanjing China with the appointments of the General Manager of Huawei CloudSEE SPDT and the head of Huawei Video Portfolio & Lifecycle Management Department.

On March 30<sup>th</sup>, 2018, he left Huawei and became a freelancer. He believes that blockchain will bring revolution to the world, and Hyperledger will become the leading force of blockchain technology in vertical industries. He is willing and able to devote himself to this revolution.

## **Baohua Yang (Oracle)**

I'd like to nominate myself – Baohua Yang, Oracle – to continue to serve on the Hyperledger Technical Steering Committee.

I'm very glad to have been contributing into Hyperledger projects and community since the beginning of the foundation in early 2016. Now I'm the lead maintainer of the Hyperledger Cello and Hyperledger fabric-sdk-py projects, and core designer and contributor of the Hyperledger fabric project. In order to promote Hyperledger technologies and grow the community more widely, I also serve as the chairperson of the Hyperledger Technical Working Group in China. Now the group has grown up to 100+ volunteers with regular meetups and contributions in term of code, adoptions and documentation. In past year, the enterprise member in China grows from 30 to 50, and offer 10% contributions for the entire Hyperledger project. Besides, I have contributed in various Open-Source projects (e.g., OpenStack and OpenDaylight) before. All these experiences make me an enthusiast of Open Source technologies and Open Source culture. I believe that Open Source technologies will be increasingly important in order to help make our life better and better.

Now I am the principle architect of our blockchain development team and take a critical technical leadership role in Oracle's new cloud service using blockchain technology. The team have improved and promoted Hyperledger techniques in terms of code contribution, adoptions, seminar and other activities continuously.

As a highly experienced R&D staff, I have been linked into the architecture, design, algorithm and system optimization areas for over 10 years, with leading the design and implementation of enterprise solutions and solving key technical challenges. Meanwhile, I have published 10s of articles in top-quality international conference and journals (e.g., IEEE INFOCOM, IEEE Transactions on Computers), with technical books (One book introducing Hyperledger and blockchain was published in Aug 2017) and patents. And I have served as TPC member for numbers of conferences and journals.

All these rich background and skills on distributed system, networking and blockchain technologies, with Open-Source contributions and community experience, make me an appropriate candidate for the TSC for the coming year.

My goal to serve as a TSC member is to not merely help Hyperledger project become more mature technically, but also help Hyperledger technologies be adopted in more business scenarios, with an active and diverse ecosystem of Open-Source collaborations among community, industry and academia. I will continue to help people learn and adopt the advanced blockchain technologies in a more efficient way.

Distributed ledger technology will make the world better!

Thanks a lot for your consideration!

**Binh Nguyen (State Street)**

Dear contributing members of the Hyperledger Community,

My name is Binh Nguyen. I am a current TSC member, and I wish to continue my TSC service to the community. I believe my contributions in the past years have been positively impactful to our community.

Since 2014, I have been a leading blockchain architect and developer on open source and enterprise projects. As the founding member and maintainer of Hyperledger Fabric, I have actively contributed to the project both in code and design. I organized and led the very first face-to-face maintainers meeting to resolve critical issues and plan for new features development. Recently I initiated a collaboration between Oracle, IBM, and State Street to solve the technical issue with MVCC Collision and co-presented that at the last Hyperledger Hackfest to the community in Amsterdam.

I have been actively working on the Architecture working group and contributed to our published papers by writing and editing many sections. Recognizing the critical roles of cryptography and zero knowledge proofs in blockchain, I collaborated with architectural members to form and sponsor the Crypto-lib working group, producing software assets usable across our various projects.

I am passionate about open source governance model and a strong believer in community development and sharing of ideas and technologies. If elected, I will continue to serve with my best ability.

Thank you,  
Binh

## **Bob Summerwill (Quantfury)**

My name is Bob Summerwill. I have been a professional software developer since 1996 with the majority of my career in the videogames industry, including 15+ years at Electronic Arts in various technical leadership roles on 20 AAA titles, including a spell as Label Software Architect for EA Sports. I always found myself gravitating to collaboration projects of all stripes within EA. I later worked as a DevOps Solutions Architect at TD Securities in Toronto. I am currently Blockchain Lead for Quantfury, CTO at Varro Technologies, a community leader for the Ethereum Project and Community Ambassador for CryptoChicks, a Canadian non-profit organization working towards gender balance in blockchain.

I have been involved in blockchain since 2014 and have been an active participant in the Ethereum ecosystem in particular since 2015, working at the Ethereum Foundation, ConsenSys and the Enterprise Ethereum Alliance. I worked as a developer on the C++ Ethereum client at the Ethereum Foundation after several months in the community adding ARM Linux cross-build support to bring Ethereum to mobile Linux devices and smartwatches.

- <https://doublethink.co/2015/11/30/first-working-ethereum-c-cross-builds/>

I spent 5 months in 2016 leading a failed attempt to relicense the C++ Ethereum client as Apache 2.0 so that the codebase could be contributed to Hyperledger. I have always been supportive of Hyperledger, recently speaking at the relaunch of the Hyperledger Vancouver Meetup. I have been participating in the Identity Working Group. I see Hyperledger as critical to the technology, providing an umbrella for open source development with a common IP and licensing policy and with the mature governance and collaboration project expertise of the the Linux Foundation standing behind the projects.

I was instrumental in the creation of the Enterprise Ethereum Alliance. As Co-Lead Architect I presented the Technical Roadmap at the launch event and later served first as Secretary of the Technical Working Group and later as Vice-Chair of the Technical Steering Committee. I have a very intimate understanding of the dynamics within enterprise blockchain, spanning both public blockchain and enterprise companies.

I have spoken at dozens of Meetups and conferences on a large variety of topics in the last couple of years and am I very active on social media and in the community:

- <https://twitter.com/BobSummerwill>

- <https://www.linkedin.com/in/bobsummerwill/>

- <https://varro.tech/media/>

Here are some blog posts about my blockchain journey:

- <https://bobsummerwill.com/2016/07/12/ethereum-everywhere/>

- <https://bobsummerwill.com/2018/07/30/i-am-running-for-election-to-the-hyperledger-technical-steering-committee/>

- <https://bobsummerwill.com/2018/08/07/building-bridges/>

I have been working to build bridges across the blockchain ecosystem for many years, but I have unfinished business in building what I see is the most important bridge of all to help blockchain reach its full potential: The bridge to mainstream adoption. That is why I spent a year working on the Enterprise Ethereum Alliance and why I want to offer my service on the Hyperledger Technical Steering Committee.

This is not a zero sum game. Nobody has all the answers, but many of us are on parallel journeys and would be better served by sharing the road. What might have looked like hard lines in 2015/2016 are increasingly blurring and the line between public and private networks is blurring.

I believe I have both the technical background, personal character and blockchain consortium experience to bring people together on Hyperledger, to broaden engagement, and especially to bring together the Ethereum and Hyperledger communities to a degree which has proved elusive to this point.

Here is my conflict of interests statement:

- <https://bobsummerwill.com/conflict-of-interests-statement/>

Best wishes, and I thank you for your consideration!

## **Chris Ferris (IBM)**

I'd like to nominate myself – Christopher Ferris, IBM – to continue to serve on the Hyperledger Technical Steering Committee.

For those of you who do not know me, I'm an IBM Distinguished Engineer, and IBM's CTO for Open Technology. I have overall technical responsibility for all of IBM's open technology initiatives (open source and open standards) and strategy. I also provide technical leadership to a large team of open source developers working on projects ranging from Hyperledger to Kubernetes, Docker and Node.js.

I've been involved in the architecture, design and engineering of distributed systems for most of my 38+ years in the IT industry. I have also been actively engaged in open source and open standards development since 1999.

I have served on the Hyperledger TSC as chair for the first six months, helping to get the project off to a successful start. I was honored to have your support in the past two TSC election cycles, to continue to serve as chair. I have worked to encourage broad and diverse participation, and collaboration across the various active and incubating projects. This past year, I have written multiple blogs, participated in a number of press and analyst interviews on behalf of Hyperledger, done video interviews and presented at a number of conferences and meetups both local and remote to promote all of the Hyperledger projects. I have also been actively working on development of the Hyperledger Fabric project as a contributor, maintainer and release manager.

I have previously chaired a number of open standards working groups, including the joint UN/OASIS ebXML Message Service Working Group, Web Services Interoperability (WS-I) Basic Profile Working Group, W3C Web Services Architecture Working Group, W3C XML Protocol Working Group (SOAP), and have participated in numerous technical committees at OASIS (oasis-open.org) including the Web Services Reliable Messaging TC which was tasked with establishing the WS-Reliable Messaging specification, that I originally co-authored with a colleague from Microsoft, as an OASIS Standard. I have also served as an elected member of the OASIS Technical Advisory Board. I served as IBM's Director on the Cloud Foundry Foundation Board of Directors after having worked over a year with my colleagues from Pivotal to help get the Cloud Foundry Foundation's open governance model defined and established, and working collaboratively to grow the community.

I believe that I have the technical breadth, depth, experience and temperament necessary to help keep the Hyperledger project on a steady and continuously improved course and to growing a diverse and vibrant development community.

@cbf (rocketchat)

ChristopherFerris (LFID)

[@christo4ferris](#)

<https://www.linkedin.com/in/chrisfer>

<https://developer.ibm.com/opentech/author/chrisfer/>

## Chris Spanton (T-Mobile)

My Name is Chris Spanton, and I would like to submit my nomination for the Hyperledger Technical Steering Committee.

### About Me:

I'm a passionate technology industry leader, specializing on developing emerging technologies in heavily regulated industries such as healthcare and telecom. I have deep experience steering volunteer-lead committees and boards across a broad spectrum of environments. After serving two consecutive terms on the Board of Directors for HIMSS (Health Information Management and Systems Society) Washington, I expanded on my service roles when invited to join The Mountaineers' Advisory Council (a select committee advising the Board) which in turn lead to advising the American Alpine Club's National Standards Committee. Specific to the blockchain community, today I'm Sr. Blockchain Architect at T-Mobile, Vice President for the Government Blockchain Association (GBA) Seattle Chapter, a member of the World Wide Web Consortium (W3C) Verifiable Claims Working Group, the Enterprise Ethereum Alliance (EEA) Telecom and Digital Identity SIGs, participated in authoring the Linux Foundation's Certified Hyperledger Sawtooth Administrator (CHSA) exam, and lead architecture and development of the Hyperledger Blockchain Showcase project, Next Directory. (<https://www.hyperledger.org/resources/blockchain-showcase?profile=next>, <https://github.com/hyperledger/sawtooth-next-directory>)

A well-known blockchain speaker with regular engagements around the world, I've spoken frequently about Hyperledger, the potential for its solutions, and the greater blockchain ecosystem. With highlights which include giving expert testimony as the voice of the blockchain industry before the Joint Legislative Committee on Economic Development and International Relations, giving keynote speeches including at the European Identity & Cloud and the Blockchain Seattle Conferences, and leading blockchain dialog in C-Suites of large enterprises and government groups, I am confident in my ability to be a powerful and recognized advocate for Hyperledger as a member of the Technical Steering Committee.

Specific to the goals of the Technical Steering Committee, the experience described above uniquely positions me to support stated objectives including coordinating the technical direction of Hyperledger, approving project proposals and lifecycle documents, creating sub-committees, communicating and coordinating with community, end-users, and industry organizations, and participating in standards communities.

Thank you for your time and consideration of my nomination for the Hyperledger Technical Steering Committee.

Best,

Chris Spanton

<https://www.linkedin.com/in/spanton/>

### **Claudio Lima (Blockchain Engineering Council)**

- Blockchain Engineering Council - BEC, Co-Founder
- IEEE Blockchain Standards, Co-Chair
- IEEE NIST Blockchain, Technical Program Committee Chair
- Blockchain/DLT Energy Cybersecurity Industry Advisor Board Member (DOE/PNNL)

Dr. Claudio Lima is a seasoned technology executive and thought leader in advanced energy (utilities, oil and gas) and telecom/IT, working with emerging technologies and digital transformation. He has a Ph.D. in Electronic Engineering in 1995 at UKC (England, 1995), M.Sc. and B.Sc. in Electrical Engineering, and Fortune 500 industry and high-tech start-up experience as Chief Technology Officer (CTO) and VP of Innovation/ R&D Labs, leading teams in advanced technologies such as Internet of Things (IoT), Enterprise Blockchain and AI, Smart Grid/Microgrid and Smart City. He served as Vice Chair of the IEEE 2030 Smart Grid Standards, where he made significant contributions to the development of global smart grid. Previously, Dr. Lima worked as Global Smart Grid CTO of Huawei Technologies in Europe-Asia-Pacific and as Distinguished Member of Technical Staff (DMTS)/ Sr Research Scientist at Sprint Advanced Technology Labs (Sprint ATL), in Silicon Valley-CA. He served as Co-Chair of the Industrial Internet Consortium (IIC)/Energy, Utility and Oil & Gas, promoting Industrial Internet of Things (IIoT), Machine Learning/AI and Industrial Blockchain Energy collaboration with industry partners, driving the Digital Oilfield transformation, including IoT Cybersecurity emerging technologies. He also served as Co-Chair of the EPRI Energy Storage System (ESS) Procurement Working Group.

Dr. Lima is currently the Chair of the IEEE NIST Blockchain Global Conference Technical Program, Co-Chair of the IEEE Blockchain Standards and Blockchain/DLT Cybersecurity Industry Advisory Board (IAB) Member of DOE/PNNL (Pacific Northwest National Laboratory).

### **Clive Boulton (Independent)**

In light of Speculative Execution CPU flaws affecting IT, blockchain and the decentralised web. After chairing the Hyperledger Requirements working group in 2017. I started participating in the Hyperledger Architecture Privacy and Confidentiality working group. After learning of Mark S. Millers work in Dr SES (distributed resilient ecmascript) and his work at TC39 at helping turn JavaScript into a first class object capabilities programming language. Which can help make smart contracts and ecommerce more secure for crypto-commerce. I have unique insights gleaned from collaborating with Ward Cunningham and from ACM: SIGPLAN. I feel we need to advise Hyperledger projects with Web3 technologies (<https://github.com/hyperledger/sawtooth-seth>). We need to advise application builders on good programming language choices and collaborate CPU vendors to make blockchain apps robust, resilient and more secure. I would love your vote to help do so as member of TSC.

Please vote for Clive Boulton.

<http://cliveboulton.com>

Github and Linux Identity cliveb.

**Dan Middleton (Intel)**

I'd like to nominate myself to the Technical Steering Committee.

My involvement across the length and breadth of Hyperledger provides me with a broad context to bring to the TSC.

I have been a contributor to Hyperledger since its launch. I was one of the initial Hyperledger Sawtooth developers and was elected in both of the TSC elections to date. I have also co-sponsored the start of other Hyperledger projects and co-chaired the Performance and Scale Working group. I am active in the Crypto-Lib lab and have made contributions to the Architecture Working Group and its seminal documents. Community is essential to open source projects and I devote significant time to working with new users and developers to welcome them into our community.

As a Principal Engineer at Intel, I bring extensive experience from a career of distributed systems, applied cryptography, and incubation of new technologies.

I would like to continue to help lead the TSC this year, building upon the foundations we've created. In particular, I look forward to expanding our technology agenda so that we can broaden our technical impact within the blockchain community.

Respectfully,

Dan Middleton  
Principal Engineer, Intel Corp.

**Greg Haskins (State Street)**

I would like to nominate myself, Greg Haskins, SVP, Distinguished Engineer, and Global Blockchain Lead for State Street Bank to continue to serve on the TSC.

I have had the honor of sitting on the TSC for the last two years, since the very first election cycle. I also have had the honor of being one of the original members of the team that helped launch OpenBlockChain, the project that eventually became Hyperledger Fabric. Since then, I have continued to lead the community as a top contributor and maintainer of Fabric, and the primary author of Fabric-Chaintool.

My background includes deep expertise in cryptography and distributed systems, and I have contributed and/or founded numerous open-source projects. I have enjoyed a successful career in software engineering and architecture that has spanned 25 years. My experience, knowledge and temperament leave me well poised to provide meaningful guidance and direction to the burgeoning field of enterprise blockchain and the Hyperledger Project. I would love to have the opportunity to continue shaping the technical direction for the Hyperledger community during the 2018-2019 session as a renewed TSC member.

I hold an MS in Electrical and Computer Engineering from Worcester Polytechnic Institute.

## **Hart Montgomery (Fujitsu)**

Hi everyone! A little bit about me: I'm a research scientist in cryptography at Fujitsu Laboratories of America (FLA). I work on a number of different aspects of cryptography (and applications of crypto) including blockchain, crypto for the blockchain, lattice (post-quantum) cryptography, and cryptographic primitives. Prior to FLA, I did a Ph.D. at Stanford in crypto under Dan Boneh.

I've had the good luck to have been involved in Hyperledger since almost the very beginning. Among other things, I've been on the TSC since the startup phase of Hyperledger and have been the chair of the white paper working group for almost two years. More recently, I've helped to start the shared crypto-lib, and I'm planning to continue working on the crypto/security aspects of Hyperledger through whatever venues seem appropriate in the future.

Due to the fact that security is absolutely paramount for many Hyperledger applications, I think it is vital that there is a strong cryptography/security presence in the Hyperledger community, including the TSC. Even if your preferred slate does not include me, please consider voting for at least some people with strong security and cryptography backgrounds. Thanks for your time.

## **Jonathan Levi (HACERA)**

I would like to nominate myself - Jonathan Levi, HACERA, "The Most Significant Bits" to continue this year to be part of the Hyperledger Technical Steering Committee.

If you want to fast-forward to a video, here is a snip of me talking about us and Hyperledger at the Hyperledger panel @ Token Fest SF <https://hacera.com> but in a few lines: I am very technical, helped Hyperledger in a few difficult conversations and decisions in 2016, 2017 and 2018, remained true to my word (e.g., by not supporting Composer too early), suggested to add "labs" instead of more incubated projects, and I believe that it's important to have enough diversity in the TSC, so as to have a start-up there, to make sure that even the small businesses are "heard". I work daily with many blockchain projects, both in public chains, permissioned and private ones - which makes me both knowledgeable & opinionated - but [mostly] in a good way! ;-)

I am a very hands-on computer scientist, applied cryptographer and a mathematician who over the years specialized in building large scale, mission critical systems that had to be highly available, secure and precise/accurate.

Have spent many years working on/with military grade cryptography ("crypto") both in the army, in academic research and afterwards in Cisco Systems, and up until a year ago I have worked for 6 months for IBM Research (Almaden), as a security consultant. Helped mostly with designing and implementing some of core crypto aspects of the Membership Services component (with Dr. David Kravitz) in Hyperledger Fabric. I have also spent just as much time in the financial sector ("finance") in the City of London and New York City. It started by selling cryptographic technology (an exit of a start-up that I co-founded when I was 24 years old) to Standard & Poor's - worked as the head of credit analytics at Barclays Capital and the head of the embedded trading-desk stats group at Goldman Sachs (mostly on building quantitative financial systems for calculating risk, on trading desks), in which I rewrote one of the most advanced risk management systems in the world in C++.

Over the last 4 years I worked with several blockchain technology stacks. Started with Bitcoin, then worked on an innovative Bitcoin exchange (a start-up, with the mission to add smart contracts on top of Bitcoin's blockchain before Ethereum was launched), then worked on Ethereum (helped to build the first Ethereum class with Prof. Dan Boneh, while I was at Stanford University) and over the last 18 months I switched my focus more to Enterprise Blockchains. I was nominated to become the first independent maintainer of Hyperledger Fabric back in July 2016 and was the co-release manager of Hyperledger Fabric 1.0. The first ever production ready release in Hyperledger.

My experience and technical knowledge are deep and broad - I'm involved with other blockchain projects, because it is important for me to look at the variety of the solutions around. For example, recently, I have been invited by IC3 and the Ethereum Foundation to judge at their hackathon in July. I am also invited from a time, to moderate a few technical panels (e.g. on "Blockchain in the Enterprise", Identity, IoT or security).

I am always happy to code and build new things, even when things are still at their “research stage”. We have even won two awards at one of the biggest hackathons in the world this year (the weekend before Consensus 2017), we participated just for fun, and won by combining Hyperledger technologies (Sawtooth + Indy) along with Ethereum wallets and JP Morgan’s Quorum on Microsoft Azure. Awards granted by the Enterprise Ethereum Alliance and the Microsoft team. It was quite flattering to win 2 awards from two of the biggest “Ethereum supporters” while using Hyperledger technology (and, by the way, not just Hyperledger Fabric). See more at <https://hacera.com/events>

I really believe in Hyperledger. From its incarnation, I worked to be a good ambassador not just of Hyperledger Fabric, but of Hyperledger in general and helped its various projects (and participants). I am part of the Hyperledger Security team and am active in several Hyperledger Working Groups. My main goal and aim is that we (at Hyperledger) all work to build, advance and promote the right technology and the security required for harnessing blockchain technology in enterprises (and yes, with confidence). I have also invested a considerable amount of time (and air-miles) to represent Hyperledger in various events, I was invited as a technical guest to the Hyperledger Members only Summit (where I gave a session about “Community Engagement as a Strategic Investment” & a full S.W.O.T analysis of Hyperledger from a community perspective), I am constantly invited to participate and judge in Hackathons, give talks, lectures and recently took part in one of the biggest recent Linux Foundation’s webinars (on Hyperledger Fabric 1.0).

I believe that I have the technical breadth, depth, experience not just technically, but also an experience that is combined with deep understanding of the market forces, the various regulatory and business environments in which I can continue to make Hyperledger shine, at the very least, technically.

On that note, I am also committed to continue to remain impartial.

**Jonathan Levi** Chief Sparkling Officer  
**HACERA** - Blockchain with Confidence

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L <https://linkedin.com/in/levitate>

## Kelly Olson (Intel)

I'd like to nominate myself to the Hyperledger Technical Steering Committee. I believe that my experience in the blockchain ecosystem, and Hyperledger in particular, make me a good candidate to help continue to grow the impact of the Hyperledger project. I have been an active participant in the Hyperledger community since its inception and was one of the original founders of the Hyperledger Sawtooth project and its introduction into the Hyperledger community. I have helped to mature that project to 'Active' status in Hyperledger and currently serve as a maintainer for the project.

Over the past year I have had the pleasure to serve as a member on the Technical Steering Committee. During this time, I have represented Hyperledger, in a number of forums including meetups in various cities, and larger conferences such as O'Reilly's OSCON and Coindesk's Consensus. In addition to my work in the open source community, I also serve as the Director of Blockchain Technology at Intel Corporation. This is a role I have held for a number of years and has given me a broad view across the blockchain ecosystem, including a number of projects not (yet?) included under the Hyperledger umbrella. I believe that this insight into alternative projects and their communities, will be valuable for understanding how to grow the impact of Hyperledger, the quality of its technology, and its developer base.

As I look forward to 2019 one of the key areas I believe is important for the continued success for Hyperledger is *collaboration* and *interoperability*. The past 5+ years has been an incredible time for blockchain experimentation with the result being a variety of architectures and novel features. Through my own experience I have found a number of ideas that work, and plenty of ideas that don't. I believe that the Hyperledger ecosystem can be strengthened through better collaboration between the projects, and their security can be improved through broader code reuse and review. There are a number of areas where these activities have started, such as collaborations between Burrow and Sawtooth and Burrow and Fabric, as well as new initiatives such as the crypto library. I believe that we can build upon this momentum and am looking forward to assisting with these, and future collaboration efforts.

## **Leon Liang (SANLIAN Technology)**

- Chief Architect, SANLIAN Technology
- Active member of Hyperledger TWG-China
- E-Estonian
- Business and System Integration Consultant, Accenture (China)
- Senior Business Analyst, Newell Brands (Shanghai)

### Expertise & Experience

Leon is a blockchain and cryptocurrency enthusiast. He has profound knowledge of Hyperledger Fabric and Sawtooth Lake. With 10 years' experience in enterprise IT consulting and systems implementation, he has expertise in big data, blockchain and cloud computing. Leon is good at collaboration with developers and business counterparts in various projects. His skills cover technology community construction, business requirement analysis, IT implementation and project management. Leon has led or participated in over 16 IT projects across different countries.

### Current Contribution to Hyperledger

As an active member of Hyperledger TWG-China, Leon has been working with other volunteers to drive the growth of Hyperledger in Greater China, mainly focusing on Fabric and Sawtooth project. Through technology discussion in email list, bi-weekly calls, WeChat and rocket channel, he has brought many local developers into Hyperledger community. Leon has given speech in several technology salons/meetups on blockchain topic as invited speaker. He has also organized/participated several Hyperledger meetups in Shanghai, Hangzhou and Wuhan. Leon is currently mentoring an intern on developing supply chain application with Fabric, which is also a Hyperledger intern project. He has substantial resource in local technology community and familiar with key stakeholders of Hyperledger member companies in China. Leon has supported maintainer of Sawtooth to present technical document through real-time verbal translation in local meetup. Besides, Leon is also participating in i18n of Fabric and translates technical documents into Chinese.

## **Mark Wagner (Red Hat)**

I would like to nominate myself for the Hyperledger Technical Steering Committee.

I have been active in the Hyperledger community for almost two years now. During this time I have tried to provide a voice for the "little guy". I had suggested that Working Group and then Lab contributors be considered as "active participants". Both of these suggestions were accepted by the TSC and changes were made to the voting rules.

While looking for a way to contribute to Hyperledger, I proposed a Performance and Scalability Working Group. This was presented at a Hackfest and was unanimously accepted by the TSC. I have been the Chair of the working group since its inception. In this role I strive to bring the best minds together to collaborate on getting it right. I also asked by the TSC to shepherd the Caliper project in its early days as we worked together to steer Caliper into an official Hyperledger project.

One of the reasons that I have chosen to run for the TSC is to provide more vendor diversity on the Committee as over half of the TSC is from two companies. My time is focused in the working groups and I am currently not associated with any of the projects. Thus I try to span all the projects with equal interest.

### **My day job**

Throughout my career I have worked at some very innovative companies. I have bounced between small startups and large companies so I understand the perspective of both sides.

I have been at Red Hat for the past 11 years a Senior Principal Engineer in the Performance and Scale engineering team. Many of my assignments tend to be the emerging technologies such as Hyperledger and IoT.

### **Long Open Source Heritage**

Red Hat is not your typical software company with an open source program. We are an open source company! We have a primary focus on the entire ecosystem with an "upstream first" policy. A great example of this community commitment is that, while Red Hat does not have a play in the blockchain world, I am allowed to bring my expertise to share with the Hyperledger community.

### **Cross Industry Collaboration**

I am the Red Hat representative at Hyperledger. In my position as Chair of the PSWG I have reached out across the industry and I have been able to some get active participation from people who are not part of Hyperledger. In a previous life, I was actively involved in the creation of the SPECvirt and SPECcloud benchmarks.

Thank you for your consideration.

**Mic Bowman (Intel)**

Mic Bowman is a principal engineer in Intel Labs and leads the distributed ledger research group. Mic has spent over 20 years working on large-scale databases and distributed systems. For example, he led the PlanetLab project that brought together more than 300 industry and academic institutions to develop and deploy a global testbed to support Internet architecture research. In addition to a Scientific American Top 50 award, PlanetLab won awards for long-term influence from SIGCOMM and Usenix.

Mic is the original architect for the Hyperledger Sawtooth and designed the Proof of Elapsed Time algorithm for more power-efficient Nakamoto consensus. He is currently investigating new methods for improving the scalability and resiliency of distributed ledgers. His deep knowledge of blockchains, distributed ledgers and distributed systems in general led to contributions to the architecture, white paper, and identity working groups in the Hyperledger project.

**Mostafa S. Joo (Finterra)**

I graduated in the study's of Physics in Iran in 2007. My career as a software engineer started immediately after my graduation. I developed passion in the fields of Computer Science, Astronomy and Cinema.

I believe the "Code is Art" and the art is "Fountain of Youth". A program can be a masterpiece of art if we believe in it.

I love blockchain technology because in my point of view it is new era in software development. It presents an immensely powerful tool in defense of freedom and will push the ideology and values of "free" software advocates deeper into the mainstream.

linkedin: <https://www.linkedin.com/in/mostafasedaghat/>

github: <https://github.com/b00f>

## **Mukhutdinov Bualt (Soramitsu)**

May 2017 — till now

1 year 4 months

Soramitsu labs

[soramitsu.co.jp/en/](https://soramitsu.co.jp/en/)

Android developer

Implementation of blockchain based (Hyperledger Iroha) application

(<https://play.google.com/store/apps/details?id=jp.co.soramitsu.iroha.android.sample>)

Implementation of internal digital identity platform using DID (<https://w3c-ccg.github.io/did-spec/>)

January 2017 — till now

1 year 8 months

Nashe delo

[xn--90acesaqsbbbreaa5e3dp.xn--p1ai/](https://xn--90acesaqsbbbreaa5e3dp.xn--p1ai/)

Android developer

Implementation and maintenance of the main volunteer Internet resource of Russia (part-time)

<https://play.google.com/store/apps/details?id=com.nd.volunteers>

January 2015 — August 2015

8 months

Digital media labs

[kpfu.ru/itis/postuplenie-v-itis/dokumenty/digital-media-lab](https://kpfu.ru/itis/postuplenie-v-itis/dokumenty/digital-media-lab)

Unity developer

Implementation of augmented reality application Augmented Band

<https://www.youtube.com/watch?v=AfRZXXQ3EyU>

October 2013 — January 2015

1 year 4 months

Foss labs

[fossilabs.ru/](https://fossilabs.ru/)

Junior java developer

Backend part of the system for nurses for processing of patient orders

Education

Bachelor

2017 Innopolis

Software Engineering, Master of Science in Information Technology – Software Engineering

2015 Kazan State Federal University

Higher School of Information Technologies and Intelligent Systems, Applied Informatics

## **Nathan George (Sovrin Foundation)**

Nathan George is the CTO for the Sovrin Foundation and a maintainer for the Hyperledger Indy project. He holds a degree in Computer Science from Utah State University and a Master of Business Administration from Brigham Young University. Nathan champions the Sovrin Foundation's engagement in the open source community through Hyperledger Indy and is a contributor to distributed identity and blockchain standards at the Decentralized Identity Foundation, Hyperledger consortium and the W3C.

Nathan has been involved in open source and writing software for open platforms since 2002. Prior to joining the Sovrin Foundation, Nathan worked as a Software Architect for Evernym, and prior to that served as Senior Engineer and Architect for IMAT Solutions, a company working on large scale search, analytics and reporting for medical data systems. His development experience spans diverse systems including robotics, manufacturing management, web development, GIS mapping, file systems, backup management, virtualization platforms, big data analytics, directory services and attribute-based security systems.

### **Why I'm running**

I would like to continue representing both the interests of Hyperledger Indy as well as the various working groups I've been privileged to participate in. We have a vibrant community that has interest in many areas. As a TSC member, I will seek to preserve the autonomy and authority of each project and their volunteers while also facilitating as much collaboration and cross project participation as we can, building towards the strongest possible brand and a more cohesive, open community. I believe in the power of ledgers as transformative to technology and society (public, permissionless, permissioned and private), and would like to support the efforts of Brian and others, building bridges in the distributed ledger and identity spaces, and inviting others who are doing innovative work to make our community the center of their open source development efforts.

**Nikolai Iushkevich (Soramitsu)**

Nikolai Iushkevich is a project manager at Soramitsu. He is a graduate of the master of science in information technology program of software engineering in Innopolis, Russia. Nikolai manages the team of Hyperledger Iroha maintainers. Over the year Iroha was released several times and the team is working now on the release candidate. By having Nikolai in TSC board, the committee will benefit from his experience related to design decisions in Iroha, software development processes, and tools used in projects, that are under the guidance of Nikolai. He is proactive and willing to help, so this might help to resolve some questions related to Hyperledger wiki or other agenda items during TSC calls.

## **Shawn Amundson (Bitwise IO)**

I would like to nominate myself to serve on the Hyperledger TSC.

I've been involved as a active contributor to Hyperledger since the introduction of Hyperledger Sawtooth. As a primary architect of Sawtooth, I've been involved in most key decisions and design discussions.

I'm proud of the work we have achieved with Sawtooth, especially at growing an active and vibrant community around the project. In several areas we continue to lead innovation, such as with Seth (which integrates Sawtooth and Hyperledger Burrow to bring EVM support to Sawtooth), Sabre (WASM Smart Contracts), Transaction Processors with parallel execution which provide the right platform to implement various smart contract engines like Seth and Sabre, a State Delta Export design which facilitates easier web application development patterns, and Consensus Engines which allow us to implement various consensus algorithms such as PoET, PoET 2, PBFT, Raft, and others. All of these features are rooted in the philosophy that Hyperledger can and should be a technology leader.

As we look forward to the next year, I'll be a strong advocate for continued technical leadership within Hyperledger with an ever-increasing focus on cross-project collaboration. We are stronger together.

At Bitwise IO, we have a dedicated team of engineers, including several maintainers, devoted to improving and building solutions on top of Hyperledger Sawtooth. As the Chief Technology Officer at Bitwise IO, I take a principled but pragmatic approach to software development and bring a smaller company viewpoint to Hyperledger.

I'd very much like to leverage my experience and dedication by joining the technical steering committee.

## Silas Davis (Monax)

Bio: I am Silas Davis, CTO of Monax the company that originally donated Hyperledger Burrow. I remain the lead maintainer of Burrow which has been integrated into both Fabric and Sawtooth Lake. Monax is launching a public legal agreements network based on Burrow at its core: <https://agreements.network/>.

Burrow is not the highest profile project but has had a lot of (hopefully positive) movement over the past few months. It occupies an interesting position within Hyperledger interest across other projects and the potential to build bridges to the Ethereum and Tendermint communities as well as between projects at Hyperledger.

I am a failed wrestler and a failed mathematician: I once had an amateur MMA fight in Glasgow and I studied Mathematical Physics (MPhys) at Edinburgh University and then more maths at Cambridge in the UK, before deciding that software was going to be more my thing. I worked at SwiftKey for 2 1/2 years working on machine learning / big (medium really) data engineering involving natural language processing at scale using across n-gram, bayesian, and neural models. I joined Monax in early 2016 as a platform engineer and became CTO about seven months ago. Driven by an interest in smart contracts as their promise to be 'a better glue' and the vague yearning to decentralise all the things I have not looked back. I love working in this area, and if you keep your head down it seems like it might just work. Hyperledger is a great organisation having had experience with others, and I'd love to get more involved.

Pros: Marmot, active lead contributor, broad interest from formal stuff to practical stuff, forcing my dogfood down my throat on a daily basis with the Agreements Network, can talk to people nicely.

Cons: Marmot, less experience than some (about 8 1/2 years commercial software), sometimes forget when my quarterly update is, bad French accent.

Why I'd like to do it: I would like to see open systems and open software succeed, Hyperledger is a great vessel for that so I would like to see Hyperledger succeed, and hopefully I could contribute to that by providing useful feedback via the TSC. Aside from that I think I could learn a lot from other members of the TSC and wider community while giving back on areas where I have a niche.

## Sjir Nijssen (Independent)

Sjir Nijssen is an emeritus Computer Science. He received his Master in Electrical Engineering at the Eindhoven (The Netherlands) University of Technology in 1965 and his Ph. D. in Applied Mathematics at the University of Leuven, Belgium in 1977. From 1970-1982 he was in charge of the Data Base Management Research Lab of Control Data Corporation with 22 fellows. In 1974 he co-founded the IFIP (International Federation of Information Processing societies) WG on Data bases, focusing on durable conceptual models; he held the chair of that WG in the period 1974-1983. In the period 1982-1989 he was full-time professor Computer Science at the University of Queensland, Australia.

In 1989 he founded his own company PNA in the Netherlands, focusing on the development of protocols how to produce durable specifications with active involvement of end users and using domain examples from the very beginning as scenarios. In 2002 with the company employing 25 professionals he retired as CEO and continued fulltime as CTO. In April 2011 he received a high Royal Award by the Queen of The Netherlands for more than 45 years dedication on how to work with knowledge in a more productive way (<https://www.pna-group.com/koninklijke-onderscheiding-voor-sjir-nijssen>). In the period 2012-2017 he studied in the context of a Dutch working group the foundation and structures of law and regulations, with a focus towards associated automated services. Since October 2017 he has studied Fabric full time. In January 2018 he became a member of the Fabric documentation WG. Since then, he became more and more fascinated by Fabric and noted some interesting functionalities in other Hyperledger Frameworks. In April he became the co-chair of the Hyperledger T & E WG focusing on content, with Kelly Cooper doing all other chair tasks. More info at: [https://en.wikipedia.org/wiki/G.M.\\_Nijssen](https://en.wikipedia.org/wiki/G.M._Nijssen)

Which goals does Sjir want to promote in the TSC, if elected?

He will focus on **quality** and **understandability** of the knowledge (both declarative and procedural) describing the 5 frameworks (Fabric, Sawtooth, Burrow, Indy and Iroha) and thereafter the same for the 5 tools (Caliper, Cello, Composer, Explorer, Quilt) with an initial goal on helping to develop for Fabric documentation with the quality of e.g. DB2 documentation (which he used at the Uni to teach a post-grad class).

Once this is partly but convincingly enough accomplished he would like to undertake similar activity for Sawtooth, Iroha, Indy and Burrow. He would stimulate the re-use of proven concepts from one framework to another.

He is a supporter of documentation based on audience specific concept lists (end users, decision makers, application and blockchain architects, admins, client application developers, smart contract developers, and framework and tool developers) with further specialization for Fabric, Sawtooth, Indy, Iroha and Burrow where relevant, and later for the 5 tools; the first concept list for end users and decision makers is scheduled to be published as v1.0 by the Hyperledger T & E WG in the next two weeks.

He will propose, and if accepted, actively support to make the entry and participation of new participants into the maintainers pools much more appealing by developing three descriptions per framework, and later per tool,

1. The extended architecture,
2. The programming guidelines and conventions and
3. A complete list of all fields, their context and their definition.

In general he will propose to give the end users, decision makers and application and blockchain architects a bit greater say in which functionalities will be given priority, as the frameworks are becoming more mature and customer acceptance becomes more important.

**Srinivasan “Murali” Muralidharan (State Street)** - nominated by Gregory Haskins

I would like to nominate Srinivasan “Murali” Muralidharan, State Street, to the Hyperledger TSC. Murali is one of the founding members of the project now known as Hyperledger Fabric, back before it was even known as a small open source project in incubation at IBM known as OpenBlockChain. Since then, Murali has been ever present in the community as a core architect, maintainer, and top contributor to Hyperledger. In addition, Murali is often seen leading many aspects of the community itself including design specifications, filing bug reports, performing code reviews, speaking at hackfests, and patiently answering questions online, etc. His humble demeanor, deep knowledge, disciplined approach to engineering, excellent communication skills, passion, intelligence, and appetite for deeper understanding make him an asset to the community.

As such, I believe he would make an excellent addition to the TSC.

## **Stanisla Liberman (CME)**

Stan is a Senior Director of Software Engineering in CME Technology Labs at CME Group. He has been leading distributed ledger and cryptocurrency technology initiatives at CME for the last three years. Internally, Stan provides technical expertise to Digitization and Ventures teams on projects involving digital assets and/or DLT solutions. He also runs multiple initiatives to educate and champion understanding of blockchain, cryptocurrencies, distributed ledger technology, and to promote Hyperledger projects throughout organization and beyond.

Prior to joining Tech Labs he has spent over a decade leading match engine support team, architecting and developing high performance distributed systems, as well as championing and completing several successful "skunkworks" projects. Stan is a leading software performance SME working across the company as well as industry experts. Before coming to financial services, Stan has worked in telecom designing and developing high volume distributed IVR systems.

In addition to serving on the initial Hyperledger TSC, Stan has been an active participant and contributor to the architecture, privacy and confidentiality, whitepaper, and identity working groups since the first days of the project, as well as passionate advocate of the many Hyperledger projects.

I would like to contribute my knowledge in many areas of technology, as well as its applications in financial services. In addition to being a technologist I have experience working with end-users and stakeholders, to both find the right tools to solve specific problems and to explain the implications of technology to business users. I hope to bring my experience and perspective to TSC in support of Hyperledger's vision of blockchain for business.

## **Steve Boyd (Ontario provincial government in Canada)**

Steve works for the Ontario provincial government in Canada where he is currently a development lead in a team that leads technical innovation in the transportation and labour sectors. Currently Steve is working in a hands on role where his responsibilities including developing his sectors' technical roadmap, defining best practices for application architecture, and overseeing coding standard policies. Steve is responsible for researching and developing proof of concepts for the feasibility and usage of emerging technologies to support business function in the provinces transportation and labour ministry sectors. Areas he is actively assessing for ministry use include distributed ledger technologies, virtual and augmented reality, and AI/machine learning.

When researching options for digital identity and registry solutions, Steve found the work that Hyperledger is doing with Fabric and Indy to be a great fit for the use-cases he was working toward solving. After completing Hyperledger training courses, countless hours of research, and technical experimentation, Steve is now the subject matter expert in his group on all things Hyperledger and blockchain.

Steve is active in his local software development and blockchain community where he has given presentations on blockchain and self-sovereign identity, has contributed to the Hyperledger indy-node project, and attends the public sector working group. Steve's current role with the Ontario government has him exploring cutting edge technologies and working to define technical roadmaps that IT will use to support labour and transportation in Canada. In the past he has worked with the technical steering committee for a large internal program to modernize Ontario's labour sector's systems.

Steve is dedicated to exploring technology and architecting clean solutions that can be relevant and used for many years. His passion for blockchain and Hyperledger, and experience defining technology roadmaps make him well prepared to be part of, and a great candidate for, the Hyperledger technical steering committee.

**Todd Little (Oracle)**

I would like to nominate myself for membership on the Hyperledger Technical Steering Committee. I have over 40 years of software development and architecture experience of which the last 30 years have been spent in developing high performance transaction processing systems. I am currently the Chief Architect for Oracle Tuxedo, the leading transaction processing platform for distributed systems, and the security architect for the Oracle Autonomous Blockchain Cloud Service based upon Hyperledger Fabric. I am active in the Hyperledger Privacy and Confidentiality Working Group and the Hyperledger Performance and Scalability Working Group, contributing to the papers those working groups are producing.

My primary interests in Hyperledger are around security, including privacy and confidentiality, performance, and consensus. I'm hoping to see more cross pollination of ideas and capabilities among the various Hyperledger blockchain platforms and see the Technical Steering Committee as the core group to make this happen.

Regards,  
Todd Little

<https://www.linkedin.com/in/toddlittle/>

## **Troy Ronda (SecureKey)**

I'd like to nominate myself, Troy Ronda, to serve on the Technical Steering Committee.

I am an active contributor to the Hyperledger community by serving as a maintainer for the Fabric Go SDK (where you can also frequently find me in the chat room). I have also contributed back to the Fabric project by suggesting features based on my experiences building solutions on top of Fabric.

I am Chief Scientist with SecureKey where I lead technical strategy for our decentralized identity and authentication platform. I strongly believe in leveraging distributed ledger technology and standards to solve business and trust problems and am very enthusiastic about creating solutions based on Hyperledger projects and furthering discussions with the community. I have more than ten years of software development and product management experience advancing initiatives that leveraged technologies such as distributed ledger technology, identity and data brokering, proximity technology (eg, NFC), secure elements and mobile solutions. I hold a M.Sc. in Computer Science from the University of Toronto.

I am excited for the opportunity to further contribute to the Hyperledger community by participating in the TSC. I believe my experiences in working on distributed ledger technology, decentralized identity, data brokering, privacy, and security are highly relevant to our community.