



# Internationalization & Unicode® Conference

October 16-18, 2019  
Santa Clara, CA U.S.A.



## SPEAKER BIOGRAPHIES

### Keynote Speaker:

#### **Dr. Rathna Ramanathan, Reader in Intercultural Communication and Dean of the School of Communication, Royal College of Art, London**

Rathna Ramanathan is a typographer, researcher and educator known for her expertise in intercultural communication, typography and alternative publishing practices. She is a Reader in Intercultural Communication and Dean of the School of Communication at the Royal College of Art, London. For the past 20 years she has run a design studio (based in Chennai and London) with a focus on research-led, intercultural, multi-platform graphic communication. Her practice evidences an interest in the research and design of marginalized content, endangered languages and practices in South Asia and an expertise in the design of multilingual communication.

### Speakers:

#### **Igor Afanasyev, Director of Localization, Evernote**

With 10 years of localization / internationalization experience at Evernote, Igor bootstrapped the i18n and l10n infrastructure from ground up, managed the development of Evernote's online translation platform, and successfully built a lean localization process that has proven to be agile and cost-efficient. In the past few years, Igor shared Evernote's unique vision of localization process and tools at LocWorld and IMUG events.

#### **Dr. Deborah Anderson, Researcher, Dept. of Linguistics, UC Berkeley**

Deborah (Debbie) Anderson is a Researcher in the Department of Linguistics at UC Berkeley. Since 2002, she has run the Script Encoding Initiative project, which helps get scripts and characters into the Unicode Standard. She also represents UC Berkeley in the Unicode Technical Committee meetings and is a member of the US National Body in ISO/IEC JTC1/SC2. In addition, she is a Unicode Technical Director.

#### **Tim Brandall, Internationalization Manager, Netflix**

Tim Brandall has over 19 years of experience in the globalization industry, both on the vendor side (Welocalize) and client side (Apple, Vivendi Universal, and now Netflix). For the past 7 years Tim has been leading the internationalization effort at Netflix, building programs to accommodate Netflix's rapid international growth. In addition, Tim is on the Unicode Board of Directors.

#### **Rob Cameron, Professor, Simon Fraser University**

Dr. Rob Cameron is a Professor of Computing Science at Simon Fraser University. His research interests include high performance parsing and text processing, SIMD and multicore parallelism, programming languages and software systems as well as open software technology. His recent work has focused on the Parabix transform representation of text and its application to high-performance XML and Unicode processing.

**Shane Carr, Senior Software Engineer, Internationalization, Google, Inc.**

Shane Carr is a Senior Software Engineer on Google's i18n Engineering team. He is chair of the ECMA 402 subcommittee for JavaScript i18n standards and is a core contributor to the International Components for Unicode (ICU) project. His work on ICU has focused on locale data, number formatting, and performance optimization.

Shane has previously presented on Zawgyi and on ICU number formatting at the 41st and 42nd Internationalization & Unicode Conference (IUC). He has also presented at the 33rd International Conference on Machine Learning (ICML) and the 2015 Annual Meeting of the American Institute of Chemical Engineers (AIChE). He holds an MS and BS in Computer Science and BS in Chemical Engineering summa cum laude from Washington University in St. Louis.

**Casey Charlton, Program Manager, Facebook**

Casey Charlton, native Texan and 15-year veteran of the translation and localization industry, is a Technical Program Manager at Facebook on the Internationalization (i18n) team. When not obsessing over business process management, human (and computer) languages & global events, he can be found living life with his wife and two sons, fly fishing for trout, chasing elk in the mountains of Washington State, and working upland birds behind his English Springer Spaniel. His hobbies include indigenous language preservation and advocacy.

**Pu Chen, Internationalization Engineer, Netflix**

Pu Chen, Internationalization Engineer at Netflix. Prior to joining Netflix, Pu worked as Principal Globalization Engineer at Salesforce, LG's Silicon Valley Lab, Oracle and Sun Microsystems.

**Craig R. Cummings, Staff Consultant/Evangelist, VMware**

Craig Cummings has been working in the field of software globalization for over 25 years. Before his recent role at VMware, Craig worked with Informatica on big data internationalization and also worked at Zynga making games in a variety of languages including Arabic. Before that, at Yahoo! Inc., he helped drive corporate technical strategy for internationalization with a particular focus on Middle Eastern markets. Prior to that, Craig was with Oracle's Tools and Applications globalization teams where he worked closely with Sun's internationalization team to shape some of the pluggable locale, resource bundle, font, and supplementary character support in Java. Craig is in his third elected term as Vice-Chair of the Unicode Technical Committee (UTC) and ANSI INCITS L2 Committee Chair. The L2 committee primarily works to synchronize Unicode and corresponding International Standards Organization (ISO) standards. In Craig's spare and copious amounts of free time, he works on adding indigenous languages to CLDR as well as on animal emoji.

**Jennifer Daniel, Creative Director, Emoji, Google**

Jennifer Daniel is the Creative Director of Google's emoji program and serves on the Unicode Emoji Subcommittee.

Prior to joining Google, Jennifer was an Art Director and Graphics Editor at the New York Times for 10 years. During her time there, she worked in the newsroom covering a breadth of topics ranging from government shutdowns, the Olympics, and goth culture.

Acclaimed for her conceptual, clever, and content-driven approach to illustration and writing, her work has been widely published and recognized internationally most recently by the ADC, TDC, AIGA, and Fast Company. Her latest book, *The Origin of Almost Everything*, explores the universe through charts and diagrams, data, and other minutiae.

Last 3 speaking engagements:

- Talk to Me, Typographics, 2018
- Fuse Design Conference, 2018
- Nordic.design Conference 2018

**Mark Davis, Internationalization Architect, Google**

Mark E. Davis is a specialist in software text processing and internationalization, and the co-founder and president of the Unicode Consortium. More recently, the chair of the Unicode Emoji Subcommittee.

**Rafael Xavier de Souza, Senior Software Engineer, PayPal**

Rafael is the lead developer on JavaScript and Node APIs for the PayPal i18n infrastructure. He is also Project Lead for Globalize.js, and was jQuery Project Lead for Globalize at jQuery. Member of the ECMA-402 technical

committee (browser standards for JavaScript internationalization). Former IBMer Lead Software Engineer (Linux Tech Center). B.S in Computer Science at USP (Brazil).

Rafael led the Globalize (the jQuery I18n project) switch to CLDR. He has created cldr.js, a JavaScript traverser for the CLDR JSON data, which serves as a low level utility for other projects to build on top of. With work he's done for PayPal, Rafael has made significant improvements in globalize.js for speed, modularity, and usability.

#### **Dr. Martin Dürst, Professor, Aoyama Gakuin University**

Dr. Martin J. Dürst is a Professor in the Department of Integrated Information Technology at Aoyama Gakuin University in Japan. Martin has been one of the main drivers of internationalization and the use of Unicode on the Web and on the Internet. He published the first proposals for domain name Internationalization and composite character normalization, and is the main author of the W3C Character Model and the IRI (Internationalized Resource Identifier) specification.

Martin has also been contributing to the implementation of the Ruby scripting language, mostly in the area of internationalization, since 2007. He teaches in Japanese and English, speaks fluent German, can get around in French, and studied Italian, Spanish, Latin, and Russian.

#### **Asmus Freytag, PhD, President, ASMUS, Inc.**

Asmus Freytag, PhD is an IDN and Unicode consultant. He is a member of ICANN's Integration Panel charged with publishing Label Generation Rules for Internationalized Domain Names for the DNS Root Zone. He is also active in the i18n Directorate advising IETF Area Directors on IDNs and other i18n issues. He is former Vice President of the Unicode Consortium and a contributor to the Unicode Standard from its first version. He is the co-author and author of two RFCs on "Representing Label Generation Rules in XML" (RFC 7940) and "Guidelines for Designing Label Generation Rules Supporting Variants" (RFC 8228). His other activities include Unicode and IDN consulting as well as typesetting and publishing a series of Swedish textbooks.

#### **Claudia Galván, Early Stage Innovation**

Claudia Galván is a technical advisor to startups looking to expand internationally. She has been responsible for building global products from the ground up and the technology used in platforms in Fortune 500 companies reaching billions of users around the world. Claudia is a regular speaker at the Unicode Conference, Developer Conference, Society of Women Engineers Conferences and Silicon Valley Code Camp, among others.

#### **Jeff Genovy, Software Engineer, Microsoft**

Jeff Genovy is a Software Engineer who has been working at Microsoft on the Windows Global Platform team for 5 years on areas related i18n, globalization, and locale data. He is a contributor to the International Components for Unicode (ICU) project, and represents Microsoft on the ICU Technical Committee. His work on ICU has primarily focused on supporting usage of ICU on Windows platforms and fixing bugs.

#### **Dr. Andrew Glass, Senior Program Manager, Microsoft**

Andrew Glass is a program manager in the Experiences and Devices Group at Microsoft. He has worked on text input and font shaping (Uniscribe) since 2008. He holds M.A. and Ph.D. degrees from the University of Washington, Department of Asian Languages and Literature. He authored the Unicode proposals for complex Kharosthi and Brahmi scripts together with Stefan Baums and has contributed numerous other proposals to improve support for other complex scripts. Prior to joining Microsoft in 2008, he taught at the University of Washington, University of Leiden, and Bukkyo University in Japan.

#### **Richard Ishida, Internationalization Lead, W3C**

Richard Ishida is helping to make the World Wide Web world wide. He leads the Internationalization work at the World Wide Web Consortium, working with developers of specifications and implementers to ensure that Web technologies allow universal access to the Web, regardless of language, script, or culture. He has a background in translation and interpreting, computational linguistics, translation tools, and global user interface design. He also serves on the Unicode Editorial Committee and the Unicode Conference board.

#### **Jessiely Juachon, Staff Engineer, VMWare**

Jessiely Juachon has 14 years of experience in the software industry. She is passionate about providing streamline software solutions to common industry problems. Her most recent work as a lead Staff Engineer at VMWare, Inc. focuses on Product Globalization.

### **Sunjay Koshy, Software Engineer, PayPal, Inc**

Sunjay is a full stack engineer at Uber Freight on the Marketplace Dynamics team. Before Uber Freight, he worked at PayPal for two years. Prior to that, he graduated from UC Berkeley where he received a B.S. in Electrical Engineering and Computer Science. He has previous experience working with information technology, developing Slack chatbots, helping other students as a computer science lab assistant, and has even led a team of interns to produce radio documentaries.

### **Jennifer 8. Lee, Co-Founder, Emojination**

Jennifer 8. Lee is one of the founders of Emojination, a small group of activists whose motto is "Emoji for the people, by the people." This global network works to make the emoji approval process an inclusive and representative process. She'll be sharing her story about how her research on American Chinese food for The Fortune Cookie Chronicles turned into a passion for approval for the dumpling emoji and beyond. It will be a thought-provoking discussion on how this new digital linguistic media is shaping the world around us, as well as the minds of generations to come. Last 3 = SXSW, XOXO and something fancy.

### **Kristi Lee, Senior Program Manager, Microsoft**

Kristi Lee is a Senior Program Manager at Microsoft in the Global Readiness group. She has been with Microsoft for 20+ years in various localization and PM roles in Office, Developer, and Corporate. She is a current member of the CLDR Technical Committee representing Microsoft.

### **Steven Loomis, Senior Software Engineer, IBM**

Steven R. Loomis, a member of IBM's Global Foundations Technology Team for 20 years, is IBM's primary representative to Unicode-TC. He was a cofounder of the Unicode Common Locale Data Repository (CLDR) project and developed its Survey Tool data collection application. Past speaking engagements include NodeSummit, JavaOne, the IUC conferences, the International Mac Users (IMUG), the Localization Certification Program of CSU Chico, as well as internal IBM events. His hobbies include Maltese language advocacy.

### **Dr. Ken Lunde, Type Architect, Chez Lunde**

Ken worked at Adobe for over twenty-eight years specializing in CJKV Type Development, meaning that he architected and developed East Asian fonts, along with the specifications on which they are based. He architected and developed the Adobe-branded "Source Han" and Google-branded "Noto CJK" open source Pan-CJK typeface families that were released in 2014 and 2017, is the author of "CJKV Information Processing" Second Edition that was published by O'Reilly Media at the end of 2008, published over 300 articles on Adobe's CJK Type Blog, and holds BA, MA, and PhD degrees in linguistics from The University of Wisconsin-Madison. Ken served as Adobe's representative to Unicode since 2006, was the primary representative from 2015 to 2019, serves as the IVD Registrar, participates in the Unicode Editorial Committee, received the 2018 Unicode Bulldog Award, and became a Unicode Technical Director in 2018. His most recent speaking engagements include:

- ATypI Tokyo 2019 (Japan, September 2019)
- IMUG (San Jose, March 2018)
- Face/Interface: Type Design and HCI Beyond the Western World (Stanford University, December 2017)

### **Arjun Madgavkar, World Ready Software Engineer II, PayPal**

Arjun recently joined PayPal as a software engineer after graduating from NYU with a double major in CS and Business. During his time in college, he founded NYC Labs, a New York based dev shop, and Imagine, a startup that used new technology to change the way tourists travel. At PayPal, he's spent most of his time improving PayPal's internal i18n API and contributing to the globalize.js open source JavaScript library. Outside of PayPal, he loves reading, writing, and debating.

### **Alicia González Martínez, Universität Hamburg**

Alicia González Martínez is a computational linguist with a multidisciplinary profile covering Arabic linguistics, Oriental studies and software development, with a special focus on Arabic Natural language processing. She holds a doctorate in Arabic linguistics and is the developer of YAKABIKAJ.

### **Mike McKenna, Globalization Strategist, PayPal**

Mike is a Globalization Architect at PayPal and is responsible for next generation Globalization Frameworks for PayPal built on Node.js, Java, and web services as well as evangelizing a Globalization First culture across PayPal, and providing G11n training and support to PayPal product teams.

Mike is a specialist and leader in globalization of software ranging from small systems to whole architectures with over two decades of internationalization experience. He is a licensed professional engineer with extensive

experience consulting or leading globalization projects for a number Fortune 500 companies and has a background in global web design, e-commerce, application design, social games, database internals, distributed bibliographic systems, test engineering, global product management, and ethnographic research.

### **Thomas Milo, Decotype**

Tom Milo is an independent scholar with a background in Slavic, Turkic and Arabic linguistics whose company DecoType pioneered smart font technology and digital publishing (the first ever digitally produced bidirectional layout of an English-Persian of legal and commercial terms, Royal Brill Publishers 1989), a contributor to Unicode since 1988 and member of the Unicode Consortium since 1992. At the behest of the Omani Ministry of Awqaf and Religious Affairs he and his team created the first fully digital online Qur'ā publishing system, for which radical new solutions for encoding and rendering of historic Arabic text had to be researched and invented. As a consultant to ICANN he made an analysis of spoofing vulnerabilities of the Arabic block in Unicode, which became the point of departure for YAKABIKAJ.

### **David Mohr, International Quality Engineer, Adobe and Adjunct Professor, Middlebury Institute of International Studies**

David Mohr has been working with internationalization at Adobe since 1997 (mainly on Photoshop). Originally focused on French, David broadened his familiarity with other languages to include German, Spanish, some Japanese, Russian, and Arabic, as well as various others. David holds a B.S. in Computer Science and a B.A. in French from Santa Clara University, as well as a B.A. in German and an M.A. in Applied Anthropology from San Jose State University. In 2014, David presented his masters research on adapting products for the Middle East at the Unicode Conference and he now teaches a course on International Design at the Middlebury Institute of International Studies.

David enjoys traveling and for several years was a volunteer with CISV (Children's International Summer Village), an international youth peace organization with branches across the world. With two kids at home now, David's new challenges include teaching his daughter NOT to code-switch in Spanish and both kids how to speak passable French. He also enjoys learning new languages (14 and counting), improving his skills in the ones he's already learned, learning new cultures, reading up on myths, legends, and folklore, exploring advances in archaeology and science, political activism, and playing RPGs.

### **Mihai Nita, I18n Senior Software Engineer, Google Inc.**

Mihai Nita has been working in the localization/internationalization field for 22 years now, and still learning. He covers "everything internationalization related", from C/C++ to Java to web technologies, from desktop and client/server to mobile, the life, the universe and everything.

He started at a small localization company in Silicon Valley, where he completed projects large and small, for well-known or less-known companies. As I18N architect at Adobe he had a hand (and code) in Acrobat, Creative Suite, and Flash Player. He then helped Netflix move from an English-only company to Canada, Latin America, and part of Europe. For his community contributions he was awarded as Microsoft I18N MVP for 6 years in a row. Since 2013 Mihai has been working on internationalization at Google, focusing on the internationalization libraries, best internationalization practices, localization tooling, and added multilingual support to Android N.

### **Dr. Anshuman Pandey, Natural Language Technologist, Script Encoding Initiative, UC Berkeley**

Anshuman Pandey is a natural language technologist and specialist of South Asian languages, who has encoded thirty scripts and numerous characters in Unicode. He was a post-doctoral researcher in Linguistics at UC Berkeley, where he was funded by a Google Research Award. He earned a Ph.D. in History from the University of Michigan. He was awarded the 'Bulldog Award' by the Unicode Consortium in 2011 for his contributions to Unicode.

### **Nova Patch, Director, Internationalization & Localization, Shutterstock**

Nova Patch is a former software engineer and current product director for internationalization and localization at Shutterstock, a leading global technology company offering a creative platform for high-quality assets, tools, and services.

### **Addison Phillips, Globalization Architect, Amazon.com**

Addison Phillips is a Senior Principal Engineer with Amazon.com's International Technology group. He is an active participant in internationalization standards, including as the current Chair of the W3C Internationalization Working Group.

**Alexey Pychenkov, Software Engineer, Facebook**

Alexey is a software engineer on Facebook's internationalization team. Worked on growth-related projects for Facebook for the past 7 years, mainly for internationalization platform.

**Garrett Rieger, Senior Software Engineer, Google Inc.**

Garret is a software engineer working at Google. For the last 5 years he's worked as the production lead for the Google Fonts project. As part of his role he works to expand, scale, and optimize Google's font serving API, deliver CJK fonts at scale. Recently he's begun working with the w3c working group on progressive font enrichment ([www.w3.org/Fonts/WG/webfonts-2018.html](http://www.w3.org/Fonts/WG/webfonts-2018.html)).

**Esko Clarke Sario, Consultant, Kotoistus/Oy DataCult Ab**

Esko Clarke Sario, senior IT-specialist with background in software localization, has previously worked as a coordinator of the Finnish national localization initiative Kotoistus. As a consultant, he has been involved in the work for better CLDR coverage and emoji localization for the languages of Finland.

**Markus Scherer, Unicode Software Engineer, Google LLC**

Markus Scherer is a member of the Google software internationalization team, focusing on the effective use of Unicode and on the development and deployment of cross-product internationalization libraries. He has been a major contributor to ICU since 1999 and designed and developed significant portions of the character conversion, bidi, normalization, Unicode properties, and collation functionality. Markus is an alumnus of the University of Kaiserslautern, Germany.

**Moriel Schottlender, Senior Software Engineer, Wikimedia Foundation**

Moriel is a physicist turned Software Engineer who speaks and thinks right-to-left. In 2013, she joined the Wikimedia Foundation as a Google Summer of Code intern, focusing on developing tools that enable right-to-left language support in their visual editor. She stayed, and is currently the Tech Lead for Wikimedia's Anti-Harassment Tools and Community Tech teams, encouraging and guiding products that accommodate Wikipedia communities in over 300 languages.

Moriel has been speaking about right to left and open source since 2013. She has presented about Right-to-Left, Wikipedia's language support and BiDi algorithm in Unicode conferences since 2016 and other technical conferences and events like StrangeLoop, Wikimania, Linux.Conf.AU, Women in I18n, "She Codes" and more.

**Alolita Sharma, Principal Technologist, AWS**

Alolita wants to see the world's languages fully represented on the Web. She believes the way forward depends on the adoption of open source and open standards like Unicode. Alolita is a board director at the Unicode Consortium and principal technologist at Amazon Web Services. Previously, she headed internationalization, localization and NLP engineering teams at Wikipedia, Twitter and PayPal. She holds multiple degrees in Computer Science. She mentors women engineers and advises international startups. You can find her on Twitter @alolita.

**Roderick Sheeter, Tech Lead/Manager of Google Fonts, Google, Inc.**

Rod came to fonts by accident, having been rudely disabused of the notion text was a "solved problem." Four years later it's still not solved :) As an individual contributor and now Tech Lead/Manager on Google Fonts Rod helped to nudge along WOFF2 and unicode-range (<https://developers.googleblog.com/2015/02/smaller-fonts-with-woff-20-and-unicode.html>), bring the Google Fonts collection to Android (<https://medium.com/google-design/the-android-developers-guide-to-better-typography-97e11bb0e261>), ship CJK fonts at scale (<https://developers.googleblog.com/2018/09/google-fonts-launches-japanese-support.html>, <https://design.google/news/google-fonts-launches-chinese-support/>) and is now working on Variable Fonts and new standards for web font delivery.

**Tex Texin - Chief Globalization Architect, Xencraft**

Tex Texin has been providing globalization services including architecture, strategy, training, and implementation to the software industry for many years. Tex has created numerous global products, built internationalization development teams, designed best practices, and guided companies in taking business to new regional markets. Tex is also an advocate for internationalization standards in software and on the Web. He is a representative to the Unicode Consortium and on steering committees for open source software. Tex is the owner/author of the popular [www.I18nGuy.com](http://www.I18nGuy.com).

### **Neha Utkur, World Ready Software Engineer, PayPal, Inc**

Neha is Software Engineer at Paypal. working on internationalization infrastructure. She is lead engineer on multi-regional identity logic. Prior to that she has worked on improving localization automation system at Paypal. She has more than 10 years' experience in previous jobs in microservice design, smart devices, root cause analysis and performance improvements as well as tools development. Outside of the work she enjoys singing Indian Classical and Bollywood music and performs regularly with the Paypal band.

### **Igor Viarheichyk, Engineering Manager, Samsung**

With 10 years of localization / internationalization experience at Evernote, Igor bootstrapped the i18n and l10n infrastructure from ground up, managed the development of Evernote's online translation platform, and successfully built a lean localization process that has proven to be agile and cost-efficient. In the past few years, Igor shared Evernote's unique vision of localization process and tools at LocWorld and IMUG events.

### **John Watson, Software Engineer, Facebook**

John Watson has been at Facebook for nearly 6 years and has been working on the i18n team at Facebook for the last 3 years. He is well known internally as an expert on multiple complex JS frameworks and is the engineer who brought the magic of fbt markup to JavaScript engineers at Facebook and is responsible for its open source release. The i18n server-side infrastructure at Facebook was one of the first things that had impressed him when he first joined Facebook, and this was what inspired him to bring a similar developer experience to the JavaScript codebase.

### **Lucas Welti, World Ready Engineering, PayPal, Inc.**

Lucas Welti is a Globalization Architect with the World Ready Engineering team at PayPal, responsible for working with the next generation of web and mobile apps. He also works to evangelize i18n and L10n best practices across all PayPal products. Lucas joined PayPal in 2015 and worked at Yahoo! before that as an i18n engineer. Previous talks:

- IUC 40: The New PayPal Mobile App
- IMUG 2016: How PayPal Launched a Global App in 140+ Countries Simultaneously
- PayPal: Created Training for All New Hires, Developed the "I18n Playbook" Used by All Design and Developer Teams, plus Many Other Trainings
- Impact on Business Processes

### **Shawn (Xiang) Xu, Internationalization Program Manager, Netflix**

Shawn Xu works at Netflix as an I18N Program Manager. She has over 18 years of experience working in the high-tech industry, creating flagship products that have massive global scale and impact. Shawn spearheaded several G11N initiatives for Netflix's global launch, enabling Netflix service simultaneously in 130 new countries around the world. Before Netflix, she worked at PayPal and Informatica.

### **Demin Yan, Senior Engineering Manager, VMware**

Demin Yan is the Senior Engineering Manager for Product Globalization at VMware, Inc., where he takes care of consulting and engineering for product internationalization and localization, and drives the tools development efforts. He has worked in the software internationalization and localization field for over 20 years, focusing on evangelizing the i18n best practices and promoting them to the R&D developer community; designing product i18n and l10n support framework; and developing tools and solutions to improve processes and quality.

### **Ben Yang, Director of Technology, PanLex**

Ben Yang is a linguist specializing in writing systems and the Director of Technology for PanLex. He is the Unicode representative for The Long Now Foundation and is a regular participant in Unicode Technical Committee meetings and the Unicode Script Ad-Hoc. He has a strong interest in making technology more widely available to speakers of underserved languages and the preservation and digitization of traditional writing systems. He has spoken at the International Multilingual User Group (IMUG), SF Globalization, and the East Bay Refugee Forum.