

Rigetti Computing

SVP Product & Engineering

March 2019 - Present

Rigetti is a full stack quantum computing startup. In addition to manufacturing quantum ICs and its high performance quantum computing systems, Rigetti provides end-users access to its QPUs through its own cloud service that service also enables access to Rigetti QPUs through Amazon AWS. In this role I am responsible for product management, engineering and operations of the cloud service including management of production QPUs. This is the only way customers gain access to a QPU, either directly or through distribution customers such as AWS. Responsibility encompasses all software development in the company including internal software used in QPU production and operations, all classical hardware integration and operation of QPUs for Rigetti's cloud services and AWS Braket, all development and SRE for Rigetti's cloud service, and development of Rigetti's software stack including compiler, simulator, QPU operating environment, and cloud service and distribution infrastructure. Product is built in the cloud (primarily Amazon), and on prem (primarily for QPU integration). As a part of the AWS Braket service, we are one of the very few integrations of third party hardware into the AWS production system.

Bolt Threads

Vice President Engineering

March 2017 - February 2018

Built software engineering organization for Bio-Materials and Retail startup separating IT from engineering. Instituted modern cloud based data pipelines including ETL and Warehouse for retail organization. Redesigned process and systems for sales order and inventory management.

Stage 3 Systems

CEO

June 2015 - July 2016

Responsibility for enterprise software company providing operational software to the maritime shipping industry with a software-as-a-service business model. Member of board of directors. Doubled annual recurring revenue, by adding customers and converting consulting to product sales with existing customers, growing revenue to \$2M. Built team to 20 including VP Sales.

President & Chief Operating Officer

November 2013 – June 2015

General operating and P&L responsibility reporting to the CEO. Member of the board of directors. Responsible for day to day operations including financial, sales, product development, engineering, customer relations and service operations. Shipped 5 products providing services across the maritime shipping industry.

Nokia

Vice President

Emerging Products

August 2011 – December 2012

Created and lead a new division to build a tablet for emerging markets with particular focus on India, China, Russia and Latin America. Built division from scratch to 200 people. First products scheduled for release in early 2013. The division was responsible for all aspects of product development and engineering, marketing go-to-market planning, including market selection, pricing, channel selection, and marketing strategy; only sales was separate from this organization. In addition to the tablet product a low cost phone prototype was built leveraging the existing software and core hardware.

Vice President

Architecture & Product Technology

August 2010 – August 2011

Rebuilt a 1,000 person global organization responsible for broad cross company technical operations, architecture and technology management. Units included: Product compliance and certification testing; internal 2G, 3G and LTE radio test network; hardware and mechanical engineering tools; company technology management and strategy.

Personally responsible for and lead negotiating Nokia-Qualcomm sourcing agreement valued at \$1 billion. Member of 5 person team evaluating Microsoft platforms ultimately resulting in adoption of Windows Mobile. Personally responsible for creating Nokia's nascent tablet strategy which when approved by the board of directors led to the next assignment.

Vice President
Technology Management
May 2009 – August 2010

Individual contributor, occasionally augmented by small staff. Three projects during this assignment, with some overlap in time.

- Led the team that sold the S60 software organization to Accenture.
- Led an evaluation of the health and capability of software development in the company, which created the process fundamentally changing software development for the largest development organizations in the company - approximately 4,000 engineers and 1,000 engineers each.
- Served as member of the board of directors of the Symbian Foundation.

Continued as executive spokesperson for all software efforts to investor, analyst and press.

Vice President
S60 Software Product Management
August 2007 – May 2009

Created a product management organization of 200+ responsible for overall product, architecture, business development and partner management for smartphone software. Refocused product management on decreasing work-in-progress, process bottlenecks. Delivered S60 3.2 and 5.0 to Nokia, Samsung & Sony Ericsson.

Personally led the acquisition of Symbian software and Trolltech, was the founding Executive Director of the Symbian Foundation, negotiated with Microsoft to license Microsoft Office on S60 - the first Microsoft Office license to a non-Microsoft operating system in Microsoft history.

a la Mobile

Chief Technology Officer
February 2006 – August 2007

a la Mobile was a venture backed (Venrock lead vc) start-up providing a complete Linux operating system platform for mobile phones to OEMs and ODMs. Responsibilities included: product definition, technical direction, product management, company strategy, business development, outbound communications, fund raising, technology licensing. Successfully refined the company strategy, product architecture and positioning for company launch and delivered product to first customer. With CEO successfully raised and closed \$5M in second round venture funding.

Sun Microsystems

CTO of consumer and client side software business at Sun.

Chief Technology Officer
Director
Client Systems Group
September 2003 – February 2006

In early 2005 added responsibility as General Manager with P/L responsibility for \$22M revenue from engineering services and support organization. Grew revenue 20% to a profit. Grew organization 40% to 120+ people worldwide (Korea, Mainland China, Taiwan, Japan Israel, India, US, UK). Services customers included: Samsung, Toshiba, Ningo Bird, UTStarcomm, Toshiba, Ricoh, PortalPlayer, Vodafone, DoCoMo, Sprint. Organization also responsible for support for all Java licensees.

As CTO, responsible for group strategy, business and technology acquisition, technical and architectural direction and standards policy for business unit. The unit grew to \$120m in revenue 1,000 people always profitable. Led the OMTP platform creation effort. Executive sponsor for Sun/Nokia relationship. Final responsibility for partner and licensing negotiations including Java licensing/development for Motorola, Nokia, SavaJe.

Primary outbound representative for business unit to Analyst and press, including keynotes at Java One, and various mobile industry events.

Director
Consumer & Mobile Systems Group
January 2001 – September 2003

Engineering director delivering successive releases of Java Platform and API technologies including: Personal Java and various profiles, Java Media Framework, Java Sound, Java TV. Java TV becoming the basis for current BluRay DVD platform. 80+ person worldwide engineering organization and business development team. Technical lead for acquisition of Pixa which became Sun's content delivery platform.

Senior Manager/Senior Staff Engineer
Java Media Engineering
JavaSoft/SunSoft
April 1993 – January 2001

Chief Architect and lead engineer for all multimedia Java APIs. Released products included Java Media Framework, Java Sound, Java TV. Led partnership negotiations with key customers including: AT&T, Power Tv, Open TV and Liberate Technologies. Successfully drove adoption of Java into all TV standards: DVB, MPEG, ATSC, Open Cable, and ARIB. Acquired and integrated proprietary third party technologies into Java 2 Platform (Headspace audio engine, multimedia codecs). Sunsoft: Delivered X Consortium Audio Server, Solaris mixing audio device driver, and Sun's desktop multimedia platform. Sun's chief audio architect. Numerous public speaking engagements for Java Media Framework, Java Sound and Sun Multimedia in general, including Siggraph and Java One.

Northfield Trading L.P.
Senior Software Engineer
October 1990 – January 1993

Built large application for automating day-to-day trading operations for an early commodities hedge-fund. Application built from scratch in C++ using InterViews (X11) UI Framework. Research in market prediction algorithms.

VLSI Design Laboratory
Research Assistant
June 1988 – October 1990

Designed, fabricated and tested 2 VLSI systems based on unique approach to physical modeling of musical instrument structures. Invited and general conference publications on research

Independent Consultant
May 1987 – October 1990

Next Computer, California Audio Labs, Commstream Corporation — Signal processing and software development.

Music Production
Recording Engineer & Music Editor
January 1984

Paul Vatelto Productions — Sound effects creation and editing for animated series *Voltron*; this was the first animation broadcast in stereo.

Koyaanisqatsi — Music & sound effects editor and mixing engineer. Feature film score by Philip Glass and Michael Hoenig. Responsible for production sound at Radio City Music Hall world premier.

Joseph Byrd Production Group — Recording and mixing engineer. Recorded music: Warner Brothers Records: Ry Cooder *Jazz*; American Heritage Society: *Jacksonian Sentimental Songs*; Television: TRW, Suzuki, On air logo for *The CBS Evening News*; *Saturday Night Live*,

Education

Executive Negotiation Workshop
The Wharton School, University of Pennsylvania, 2004

Leadership Development Program
Center for Creative Leadership, 2004

Ph.D. all but dissertation, Electrical Engineering
Master of Science, Electrical Engineering
University of California at San Diego, 1990

Bachelor of Science, Electrical Engineering
University of California at San Diego, 1988

Publications

"Mobile Phones and Linux: Prepare for Disruption." David Rivas. *Linux Magazine*, August 2006.

"VLSI for a Physical Model of Musical Instrument Oscillations." David Rivas, Steve Watkins, Paul M. Chau. *Proceedings of the 1989 International Computer Music Conference*, Columbus, Ohio pp. 253–256.

"VLSI Signal Processing for Sound Synthesis." David Rivas, Steve Watkins, Paul M. Chau. *Proceedings of the 1989 IEEE ASSP Workshop on Applications of Signal Processing to Audio and Acoustics*, New Paltz, New York.

"Personal Computer Microworlds for Learning about Signals and Sound" Mark Dolson, Abe Singer, David Rivas. *Proceedings of the 1987 International Computer Music Conference*, Urbana Illinois. pp. 300–310.