Tharakram Krishnan
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SUMMARY
- Shipped over 8 Telecom and Media software products designed and developed from scratch in a span of 13 years.
- Used lean methodologies to conduct business model search and discovery; Marketing research methods to develop insights on marketing strategy and pricing
- Strong technical experience in Broadcast/Consumer video and cable/IPTV markets; Deep understanding of strategies in the IT, telecom and media industry.
- Graduated from the MBA program at Haas school of Business at UC Berkeley (May 2015).
- Developing financial analysis background, CFA level II candidate;
- Broad skill-set and in depth knowledge of both hardware and software systems enable me to quickly learn and adapt to new technologies and skills.
    - Imaging and video algorithms development, IOS programming, Web development using Python and flask, GUI design and programming, Network systems programming, high reliability systems programming, distributed systems, Machine learning, Big data.
    - C/C++, Objective C, Python, shell programming, hardware debug using logic analyzers and oscilloscopes
    - Excel for financial analysis and IBM SPSS, Tableau, R.
    - Project management using either Agile or Waterfall methods

CONSULTING PROJECTS

Associate intern at Three Bridges Ventures   **May 2014 – Aug 2014**
- Conducted industry analysis on industrial internet of things (IIOT) and created a report on opportunities.
- Analyzed the business plans of the portfolio companies and proposed new business model options.

Haas school of Business, UC Berkeley   **Aug 2012 – Present**
Early stage venture search and discovery
Transcence is a startup focusing on developing products to help the deaf and hard-of-hearing community.
- Used lean methodologies to perform customer discovery, evaluate product market-fit, validate the business model and build a minimum viable product.
- Managed partnerships with Google, Reco technologies and within the Deaf community

Marketing research for EventBrite
- Conducted primary and secondary market research for Eventbrite an online event search website, to position itself as a primary online event listing site for its customers.

Pricing analysis
- Conducted conjoint survey and used cluster analysis to determine WTP of consumers of microwave ovens.

Thinker Tinker Consulting   **Aug 2008 – Oct 2011**
Founder and Lead developer
Products: *Dr.Perricone* and *WTFatigue?* iPhone applications, wireless fire alarm, VOIP device using Google voice.
- Performed customer discovery, gathered insights and translated insights into product features.
- Designed and developed embedded applications and led a team of graphic designers and developers to deliver based on customer requirements.

EXPERIENCE

Dolby Laboratories Inc.   **Oct 2011 – Apr 2015**
Product Manager
- Determined and defined performance metrics for the Dolby conference phone satellite microphones and drove the project cross-functionally to deliver the product on schedule and within budget. Defined pricing strategy by assessing the competitive landscape.

Staff Engineer – Tilera Lead engineer in the Advanced Display and imaging group
The **PRM monitor** is an advanced display used in post-processing environment for color-grading and color gamut emulation.
- Architected software to drive a new solution for the PRM monitor that reduced cost by over 50%. Led a team of four engineers to develop both algorithm and user-interface management on the Tilera multicore processor
- Worked cross-functionally with QA, marketing and core algorithms teams to translate product feature requests into robust software modules
- Managed relationships with Tilera field application engineers and the broader R&D team within Dolby
- Ported proprietary display algorithm to run on the Tilera processor and developed software that took advantage of the multicore parallelism and Intrisics optimization offered by Tilera processor

- Designed and orchestrated prototype demonstrations for trade shows

RGB Networks Inc.   **Oct 2006 – Oct 2011**
Senior Staff Software Engineer - Platform
- Developed product requirements in conjunction with technical marketing team, authored high-level scope and design documents and performed tasks in a risk-managed and timely fashion for over 4 award-winning Cable/IPTV/Ad insertion products in a span of 5 years
- Responsible for embedded software development from conception through production on the host application. Developed drivers and configuration scheme for the RF/QAM output for both **USM** (multi-spectrum edge QAM device) and **UQAM** (Full spectrum edge QAM device)
- Designed and developed port-mapping application, privacy mode encryption handling, Gigabit Ethernet drivers and support for virtual MAC addresses for both **USM** and **DBM** (Dynamic bandwidth manager).
- Responsible for board bring-up and Linux rootfs/driver creation, installation and maintenance for **UQAM** and **RPM** (Repurpose module used for audio transcoding and integration) products. Added diagnostic tools and automated testing using python scripts. Maintained infrastructure software, build scripts, and design system software for **GCM** (Gateway Control Module).
- Setup demos and prototypes for tradeshows and conferences

Harman International/Margi Systems Inc.   **Feb 2005 – Oct 2006**
Embedded Software Engineer
- Reduced development costs significantly by porting the software used by Harman's automobile product to a very high quality consumer video product (**Mark Levinson No51 DVD Player**).
- Managed relationships with our partner companies: STMicro, Micronas and Mark Levinson
- Developed and debugged device drivers for SPDIF, I2S audio and setup communication between the audio post-processing chip and the ST5588 to synchronize and set up audio on the SHARC DSP.
- Improved the video filter settings to remove the "Chroma bug". Worked on synchronizing external video chip with the MPEG2 decoder
- Introduced paced fast-forward and fast-rewind at 2X, 4X, 8X and 16X speeds

Doremi Labs Inc. (acquired by Dolby Labs Inc.)   **Nov 2002 – Feb 2005**
Video Hardware Engineer
- Participated in the complete development lifecycle of the **Orca MPEG2 Encoder** from designing a prototype to releasing the product to customer.
- Developed Boot code in assembly and C for the IBM PowerPC 440GP and implement low-level test routines to verify hardware and implemented a lightweight real time 'operating system ', using a simple event-handling scheme. Developed custom device drivers for serial port, Ethernet, DVB-ASI, closed captioning and drivers to control VTRs via the Sony 9pin protocol.
- Demo product and gather technical requirements from customers
- Authored the operating manual for the product.

Multi-rate Signal Processing Laboratory, UT Arlington   **Sep 2000 – Aug 2002**
Research Assistant
- Designed and developed a fast and efficient MPEG layer 3 Audio encoder/decoder using the Integer Modified Discrete Cosine Transform (MDCT).

Publications:
T. Krishnan and S. Oraintara, "A Fast and Lossless forward and inverse structure for the MDCT in MPEG audio coding", International Symposium on Circuits and Systems (ISCAS), May 26-29, 2002.
T. Krishnan and S. Oraintara, "The Integer MDCT and its application in the MPEG layer III audio", 10th DSP Workshop, May 2002.

EDUCATION
Haas School of Business, UC Berkeley: M.B.A May 2015
University of Texas at Arlington: MS in Electrical Engineering May 2002
University of Madras: BE in Electronics and Communication Engineering May 2000

AWARDS/ ACTIVITIES
- Graduate Fellowship at the University of Texas at Arlington
- Member of the Haas technology club and the Finance club
- Member of the Eta Kappa Nu (HKN) Electrical engineering honor society