

AMIT ANIL PATANKAR

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EDUCATION

University of California, Berkeley

Major: B.S. Electrical Engineering and Computer Science

College of Engineering

Graduated: May 2015

EXPERIENCE

Google Brain (Software Engineering)

Mountain View, CA, Feb 2017 – Present

- Software engineer on the TensorFlow team specializing in cloud infrastructure, build systems, and automation projects
- Invented, engineered, and implemented a bot that triaged, assigned, and maintained issues on TF's GitHub repositories
- Migrated the TensorFlow ecosystem C++ to Python language binding protocol from SWIG to pybind11
- Authored introduction workflows and code for Eager mode for deep, convolutional, and recurrent neural networks
- Advocated and evangelized the TF and Keras APIs through ML conference presentations and Google startup consulting
- Created and maintained *tf-nightly*, the first reliable nightly package across all production ML open-source frameworks

Nest (Integration Engineering)

Palo Alto, CA, June 2015 – Jan 2017

- Managed and maintained 10 automation server racks used for firmware pull request validation and daily automation
- Developed and maintained end-to-end pairing automation platform over BLE, WiFi, and 6LoWPAN. The platform was used across multiple cross functional teams and enabled daily post-pairing feature validation for nightly firmware builds
- Owned the automation repository, created APIs for serial logging and interfacing for serial devices, standardized the format for automation test cases, maintained Python package compatibility, and approved all new feature pull requests
- Applied Keysight Agilent meters and current measurement tools for battery life extrapolation for power modeling
- Spearheaded an automation tool for the services team that practiced service provisioning on a mock account and device

Apple (SEG Design Verification)

Cupertino, CA, May 2014 – Aug 2014

- Tested and verified SerDes physical layer BIST and loopback tests at both unit level and full chip level for 4K display
- Full chip display and video pixel pipeline testing using interfaced transactor and dual processor communication
- Designed automated and randomized checkers for end to end data authenticity using C, System Verilog, and Perl

NetSpeed Systems (SoC Simulation)

San Jose, CA, Apr 2013 – Sept 2013

- Designed a cycle approximate model for a network on chip (NoC) that injected and ejected packets from different interfaces, advanced the clock cycle, and created a NoC based upon added hosts and traffic patterns
- Extensively updated SoC interconnect simulator to support parallel packet injection, randomized packet generation, tx/rx rate enforcement, imported traffic profiles, and NoC layer arbitration amongst competing flows (*Patented*)

PROJECTS

The Motive App (CEO and Founder) www.motive.app

Fremont, CA, Sept 2018 – Present

- Created an iOS and Android app with a synchronized Firebase backend that lets friends compete in challenges together
- Supported accounts, push notifications, different challenge types, activity feed, live chat, and image and media uploads
- Managed a team and led product architecture, feature implementation, business direction, and marketing campaign

NFL Quarterback Draft Projection (AI/ML Engineer)

Stanford, CA, Sept 2017 – Dec 2017

- Compared logistic regression, random-forests, SVMs, and neural networks models for classifying quarterbacks as NFL-ready or busts based on college data and the NFL teams that draft them
- Used PCA, k-fold cross validation, and TensorFlow Estimators to create a deep model with 73% test accuracy

Excelerate Inc. (CEO and Founder)

Berkeley, CA, June 2013 – Jan 2016

- Invented, designed, and provisionally patented the algorithm for the application of data analytics to help test preparation
- Offered two different products: a PC app for test prep center administrators and a individual direct consumer website
- Managed a team of engineers, accountants, and salesmen while selling products to top tier clients in the industry

TECHNOLOGY SUMMARY

Languages: PYTHON, SWIFT, BASH, C++, C, VERILOG, SYSTEM VERILOG, JAVA, PERL, ARM, MIPS, MATHSCRIPT

Platforms: TensorFlow, Keras, Firebase, Xcode, Google Cloud Platform, AWS, GitHub, Colab, Django, Docker, Jenkins

ABOUT ME

- 2014 Chapman University Business Plan Competition 1st place winner for Excelerate Inc.
- Technical Consultant for Voyager Consulting Group at UC Berkeley for Aerospike and the NBA
- Fluent in four languages: English, Spanish, Hindi, and Marathi (*US Citizen since birth and Overseas Citizen of India*)
- Hobbies include basketball, traveling, aviation, TV shows, sports, fantasy football, foreign movies, and hacking