

EDUCATION

The University of Texas at Austin

May 2019

B.S.E.E, Electrical & Computer Engineering – GPA: 3.5 / 4

Coursework: Data Structures, Algorithms, Data Science Laboratory, Digital Signal Processing, Operating Systems (*upcoming*)

Member, Longhorn Entrepreneurship Agency

LANGUAGES AND TECHNOLOGIES

- Programming Languages: Python, Java, C++, C
- Development Tools: Git, Bash
- Systems Software: Linux, Kernel Modules, PCIe Drivers, DPDK Drivers and Applications
- Embedded Systems: ARM Assembly, Particle, Wiring

PROFESSIONAL EXPERIENCE

Software Engineering Intern, Dell EMC

May 2018 – August 2018

Platform Technology and Architecture Team, Server Division, Office of the CTO.

Software Systems Engineering Intern, Dell EMC

May 2017 – August 2017

Platform Technology and Architecture Team, Server Division, Office of the CTO.

- Evaluated feasibility of DPDK framework (open-source API for fast packet processing in user-space) for use in Dell EMC server solution involving multiple Virtual Machines.
- Ported kernel-based PCIe device driver + S/W infrastructure for custom FPGA device to the DPDK framework in user land: **C, Linux.**
- **Built working Proof of Concept** of two-way communication between systems utilizing separate device drivers.

Venture Partner, Contrary Capital

August 2016 - Present

Contrary Capital is a decentralized, university-focused venture capital fund.

- Conducting due diligence (via market research, investment memos, etc.) to evaluate feasibility of various campus-borne startups as potential fund investments – corresponded with **~30 startups and counting** since August 2016.

Marketing Manager, Sup

May 2016 – August 2016

Sup is a mobile application that finds friends who are nearby and available right now for social activities.

- Grew total app installs from **5k to 10k in 3 months** via campaigns on Facebook Ads, Google AdWords – app had 5k installs in 1.5 years prior.
- Set up automated marketing campaigns to hit short-term target of 15k total app installs by September 2016.
- Reduced average cost-per-app-install from \$1.93 (at 5k installs) to **\$0.60** (at 10k installs).

PROJECTS

Predicting Movie Profitability

Spring 2018

github.com/oupton/startup-ds

Predicting whether or not a movie will be profitable, with 0.86 AUC accuracy.

- Built custom dataset derived from Kaggle dataset, using various APIs and web scraping: **BeautifulSoup, YouTube Data API, TMDb API, OMDb API.**
- Experimented with Keras neural nets and XGBoost to build final model.

Read our blog post at oupton.github.io/startup-ds.

Hotspotter

HackTX, Fall 2016

github.com/shahidhn/hotspotter

HotSpotter helps geographically pinpoint the physical broadcast source of a WiFi network in the area.

- Wrote firmware for Particle Photon device to detect SSIDs and RSSIs of local WiFi networks: **Wiring, Particle.**
- Built rudimentary mobile app for user to read RSSI of selected network in real-time: **Porter, Particle Cloud API.**
- Placed **Top 10** out of 58 teams + won MLH Best Device Privacy Hack + won 1517 Keep Building Award.