

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, Operating Systems (*upcoming*), Multicore Computing (*upcoming*)
Member, Longhorn Entrepreneurship Agency

LANGUAGES, TECHNOLOGIES AND PLATFORMS

- Programming Languages: Python, Java, C++, C (*Proficient*)
- Development Tools: Git, Bash, Linux
- Cloud Architecture: Kubernetes
- Systems Software: Kernel Modules, PCIe Drivers, DPDK Drivers and Applications
- Data Science, Machine Learning: Anaconda, Numpy, Scipy, Pandas, BeautifulSoup

PROFESSIONAL EXPERIENCE

Software Engineering Intern, Dell EMC

May 2018 – August 2018

Office of the CTO, Server and Infrastructure Systems.

- **Built working Proof of Concept** of dynamic bare-metal Kubernetes cluster expansion, based on workload-specific needs.
- Worked with vendor to build Python library to leverage proprietary API harnessing composable architecture, in order to enable cluster scaling.
- Documented literature review and planned for immediate future steps in order to achieve cluster shrinking.

Software Systems Engineering Intern, Dell EMC

May 2017 – August 2017

Office of the CTO, Server and Infrastructure Systems.

- 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-space PCIe device driver + S/W infrastructure for custom FPGA device to the DPDK framework in user-space: **C, Linux**
- **Built working Proof of Concept** of two-way communication between VMs utilizing separate drivers for same device.

Venture Partner, Contrary Capital

August 2016 - Present

Contrary Capital is a decentralized venture capital fund making seed/pre-seed investments in university-born startups.

- Conducted due diligence (market, team, and product assessment) to evaluate ~30 startups and counting.
- Presented partnership meetings for 3 startups as potential investments, out of which fund invested in 1 company.

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: **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.