Cameron Dart

Phone: (630) 200-2504 Email: camerondart13@gmail.com Github: skamdart LinkedIn: cdart2

Education

Bachelors of Science in Mathematics and Computer Science **August 2014 - May 2018**
University of Illinois at Urbana-Champaign, Champaign, IL

Coursework
OOP | Data Structures | Discrete Math | Calculus I, II, III | Linear Algebra | Probability Theory | Number Theory
Abstract Algebra | Systems Programming | Computational Theory and Algorithms | Numerical Methods | Real Analysis
Programming Languages and Compilers | Graph Theory | Numerical Analysis | Nonlinear Programming

Technical Skills
Python | C | Go | Git | Linux | Docker | Kubernetes | LaTeX | Scala | Bash | Haskell

Work Experience

Fair Financial Corp - Software Engineer in Data Engineering **May 2018 - Present**
Santa Monica, CA

- Saved 40 man hours/week and enabled company to pledge $2,000,000+ of assets on a biweekly basis with data pipelines
- Spearheaded Publisher/Subscriber architectures for asynchronous communication in a distributed environment
- On boarded and mentored mid-level engineer on best practices in Python

Sprite Robotics - Software Engineer **March 2018 - June 2018**
Remote

- Implemented RESTful Flask (Python) services for firmware distribution process using AWS EC2 and S3
- Setup continuous integration (CI) using Gitlab-CI to automate a suite of pytest tests
- Created initial star schema data model in SQL for customer, firmware, and hardware data

Laboratory of Computational Plasma Physics - Undergraduate Researcher **Summer 2017**
Champaign, IL

- Integrated C based unit tests with Python integration tests for petascale Ordinary Differential Equation (ODE) solver
- Implemented statistical algorithms such as random sampling in C
- Converted GNU Makefile to CMake build system

Peach Academics - Software Developer **Fall 2016 - Spring 2017**
Remote

- Collaborated remotely to build peer-to-peer tutoring platform using Django, NodeJS, AngularJS, and Amazon Web Services
- Designed and managed distributed application with a service oriented architecture
- Configured NGINX as reverse proxy for Django, Node, and websocket servers with LetsEncrypt SSL certificates

Tesla - Software Engineering Intern **Fall 2015, Summer 2016**
Fremont, CA

- Prototyped MEAN stack web application estimated to save $\$250,000$ a year
- Collaborated with UI designer to build an interactive data visualization using D3JS and MasterCard internal APIs
- Optimized time and space complexity in Python error log scanning script

Publications

- TODO: Abstract submitted and accepted for the DPP17 Meeting of The American Physical Society
- TODO: Abstract submitted and featured in 2017 Blue Waters Project Annual Report

Research Experience

Attention Networks For Classification of Brain Images **Spring 2017**
Prof Sanmi Koyejo, Urbana, IL

- Trained 3-D Convolutional Neural Networks (CNN) using Tensorflow for the classification of two task MRI images resulting in 95% accuracy
- Modified CIFAR-10 CNN to predict brain age from fMRI data
- Attended weekly Machine Learning and Computer Vision seminars discussing recent work in respective fields