RYLAN SCHAEFFER

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1735 Cherrytree Lane
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EDUCATION

University of California, Davis   June 2016

Bachelor of Science, Computer Science Engineering

Bachelor of Science, Statistics

University of California Regent Scholar

GPA: 3.5 / 4.0

EXPERIENCE

Python Developer, Daily Fantasy Sports Lineup Prediction Project   1/2016-4/2016

Developed data pipeline to profit from online daily fantasy sports websites. Scraped and cleaned National Basketball Association data, then leveraged data to predict individual player performance using XGBoosting. Formalized lineup selection as an integer programming problem and implemented solver using PuLP that outperformed industry-standard in 47% of cases and tied in 50% of cases.

Python Developer, Undergraduate Researcher for Prof. Norm Matloff   9/2015-6/2016

Led team of six undergraduates to develop online testing platform for use in UC Davis classes. Deployed in two courses to approximately 75 undergraduates. Built server to push test problems client-side and to accept student submissions.

Instructor, Bitcoin and Cryptocurrencies   12/2015-6/2016

Designed and taught undergraduate course on leveraging distributed consensus protocols and cryptographic primitives to create decentralized digital cash. Covered advanced topics including Ethereum, Zerocoin, Enigma and the Bitcoin Lightning Network. Wrote programming assignments and grading scripts.

Chief Financial Officer/Chief Operating Officer, Associated Students of UC Davis   4/2014-2/2015

Authored and managed ASUCD's $12 million budget. Solved $100,000 structural annual deficit. Improved operating efficiency of 26 businesses and services to better serve UC Davis undergraduates. Hired unit directors and new ASUCD staff advisor. Beyond day-to-day management, accomplishments include:

-Merged Campus Copies/Classical Notes with the Post Office to halve labor costs

-Restructured Experimental College's and Whole Earth Festival's operating models for future stability

-Reformed Business and Finance Commission auditing procedures and added enforcement mechanism to unit director reports to ensure timely, accurate and actionable information

SAMPLE PROJECTS

Fuel Droplet Image Analysis for Prof. Benjamin Shaw

MATLAB script to track radius of soot-obscured fuel droplets combusting aboard ISS. Used voting algorithm between circular hough transform of images and circular hough transform of gradient mask, interpolating values for noisy images.

Stack Overflow Web Scraper

R script to analyze user difficulty with different functions through Stack Overflow posts. Scraped summaries, questions, answers, and comments of target tags using XPath queries.

Virtual Operating System

C++ virtual operating system on top of professor-provided virtual machine, including a command line interface, piping, redirection, scheduling, memory pooling and FAT image mounting.

TECHNICAL SKILLS

Programming Languages: Python (NumPy, Pandas, Scikit Learn), C++, R, MATLAB, SQL (Postgres, SQLite), Java
Operating Systems: Linux, Windows

UNIVERSITY SERVICE, AWARDS AND HONORS

Outstanding Senior Award, Department of Computer Science and Engineering	6/2016
College of Engineering Dean Recruitment Advisory Committee	10/2014-6/2015
Tau Beta Pi Engineering Honor Society, Phi Kappa Phi Honor Society	6/2013
Champion, 2011 Tournament of Champions, Congressional Debate	5/2011
Eagle Scout, Boy Scouts of America	5/2011
Party Chairman, California Boys' State	6/2010