Calvin Lui

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EDUCATION

University of California, Berkeley | Berkeley, CA

B.S. Electrical Engineering and Computer Science

Class of 2017

Relevant Coursework: Currently Enrolled *

61B: Data Structures 170: Algorithms / Intractable Problems 61C: Computer Architecture

186: Database Systems 162: Operating Systems 70: Discrete Mathematics / Probability Theory

168: Networking* 161: Computer Security 188: Artificial Intelligence

PROFESSIONAL EXPERIENCE

Software Engineering Intern | Cisco Systems, Inc.

May 2016 – Aug 2016

- Full-stack development of Platform as a Service (PaaS) application for creating and running custom tool chains
- Designed a flow/emits NoSql database model and integrated code coverage metrics with visual analysis
- Integrated RedisMQ scheduler to dynamically route requests and execute tasks based on available resources
- Python based RESTful API on a Flask web server utilizing MongoDB, jinja rendering, javascript, & jQuery
- Top 7 Finalist team for business unit hackathon with custom dashboards on top of an internal log base

Software Engineer, Part-time | TrueCar Inc.

Oct 2015 – *Dec* 2015

- Developed an internal Java API catering to data analysts to make simple requests to invoke custom Hadoop data processing, Spark model training, and error statistics generation to provide simple access to resources
- Used Apache Zeppelin to create a structured, customizable Scala notebook enabling interactive visualizations

Data Engineering & Science Intern | TrueCar Inc.

May 2015 – Aug 2015

- Applied machine learning libraries to generate pricing models that accurately determines the market retail value of used vehicles to within a mean absolute percent error (MAPE) of 7%
- Constructed a multi-step workflow in Apache Hadoop (Java) & Spark (Scala) to pre-process, enrich, and filter numerous large data sets under an application scheduler
- Calculated metrics depicting current auto-market trends, and indexed to Elasticsearch for Kibana dashboards

PROJECTS

Mozilla Firefox (Marionette) | Open Source Contribution

July 2016 – Present

• Contributed bug patches to the automation driver & test tools for the Firefox (Gecko engine) desktop platform

Stock Quote Tracker | Java, Personal Project

Dec 2014

• Built a JFC/Swing GUI app that retrieves real-time quotes through Yahoo Finance API & Java multi-threading

Course Exam Downloader | Python, Personal Project

Dec 2015

- Implemented a web scraper that identifies & downloads past exams from UC Berkeley course exam databases
- Beautiful Soup 4 (HTML Parser) and Requests (HTTP) Python Packages

Apache Spark Puzzle Solver | Python & Spark, Class Project

Oct 2014

• Utilized Spark's MapReduce framework and Amazon EC2 to solve reversible puzzles with breadth-first search

SKILLS

Proficiency In: Python, Java, SQL

Exposure In: C, HTML/CSS, Flask, MongoDB (NoSQL), Javascript (jQuery), Jinja, Hadoop, XML/YAML, Git, Unix(Shell Scripting), Apache Tools (Oozie, Maven, Avro, YARN), Spark, Scala, Elasticsearch, Heroku, Agile

ADDITIONAL ACTIVITIES AND EMPLOYMENT

Berkeley Student Affairs - IT Sigma Phi Epsilon, *Cal Alpha* Berkeley IEEE Alpha Phi Omega, *Gamma Gamma*