Charles Chen

Fremont, CA 510-493-0781 charles.l.chen.clc@gmail.com

github.com/CCInCharge linkedin.com/in/charles-l-chen ccincharge.github.io

Experience

Data Engineering Fellow @ Insight Data Science

Jan '18 - Present

- Created a web app to allow for data visualization of historical weather patterns at campsites
- Implemented an ETL data pipeline with Spark to perform data transformations on 300 GB of data
- Tuned DataStax's spark-cassandra-connector to improve write speed to Cassandra database by 3x
- Collaborated with DataStax to architect an open source code contribution to their connector

Search and Rescue Volunteer (Trainee) @ Cal-ESAR

Sep '17 - Present

- Nurtured skills to locate and rescue missing people in the wilderness and in urban areas
- Learned and practiced how to administer first aid in stressful wilderness situations

Aerodynamics Engineer @ Boeing Commercial Airplanes

Aug '15 - Sep '17

- Led the team-wide adoption of git to maintain version control of a legacy analysis tool
- Performed real time data monitoring on-board flight test aircraft during hazardous maneuvers
- Developed Python and Bash scripts to automate creation of data visualizations and git use

Program Manager/Aerodynamics Lead @ USC AeroDesign Team

Sep '13 - May '15

- Designed the winning airplane (out of 73) for a worldwide drone design, build, and fly competition
- Managed the priorities of more than 10 different sub-teams

Projects

NewsApi Java Wrapper

Dec '17

- Designed, developed, and deployed a Java wrapper for a REST API in under one week
- Ensured code quality with Travis CI, 76% code coverage with unit tests, and detailed documentation
- Deployed project for open source use to Maven Central Repository, using Maven build tool

Campsite Checker

Sep '17 - Nov '17

- Developed web app that shows campsites with available reservations
- Utilized geolocation and data scraping to find live location and availability data of campsites
- Implemented with a React frontend, Python backend, and deployed via AWS

Education

B.S. in Computer Science @ Oregon State University (Online) Sep '16 – Sep '18 (Expected) **B.S./M.S. in Aerospace Engineering** @ University of Southern California Sep '10 - May '15

Skills

Languages: Python, Java, SQL, JavaScript, Bash, MATLAB **Data Technologies:** AWS, Spark, Cassandra, MySQL, SQLite **Web Technologies:** Flask, Node.js, Express, React, jQuery