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| Scott Sutherland  New university graduate with B.S. Data Science and minor in Mathematics. Interested in pursuing challenging, data-driven software and analytics projects.  Professional Experience  Software Engineering Intern | Amazon  June 2022 – Sept 2022   * Designed and implemented a versioning system for objects controlled by users via a REST API, enabling safe rollback to previous states. * Interacted with DynamoDB NoSQL databases to read and write version information. * Improved object rollback resolution time from hours to milliseconds by eliminating dependencies on manual search and recovery. * Helped optimize existing database calls adjacent to versioning system work saving thousands in read/write costs.   June 2021 – Sept 2021   * Designed and implemented granular access controls for a REST API to work end to end with a front-end UI for Amazon Alexa, enabling customers to safely interact with the API in a self-service fashion. * Implemented functionality to ensure calls from front end to back end are authenticated, protecting customers with a secure environment. * Improved service scalability by removing dependency on manual internal support, decreasing time to resolution from days to milliseconds. * Wrote documentation to detail design, implementation, use, and how to expand upon completed access control work.   Software Engineering Intern | Kernel Labs  June 2020 – Sept 2020   * Developed web crawlers using PHP and cURL designed to crawl multiple pages in parallel via a breadth first search. * Set up MySQL databases to store data from web crawlers and serve as queues for crawls of significant depth. * Created custom Mechanical Turk tasks to facilitate gathering of ML training data and built tools to gather/clean classification data using NodeJS.   Projects / Other Work  Graph-Based Reddit Recommendation System | UCSD   * Worked with 3 peers to develop a recommendation system for communities on Reddit for users given their interactions on the site with other users and communities represented as a graph with comment text corpus and graph community embeddings. * Outperformed non-graph collaborative filtering methods such as Cosine and Jaccard similarity at encapsulating true interactions for larger number of recommendations (> 10) by 60% by the precision metric. * Utilized tools suite of TigerGraph for ML algorithms and data storage.   Smart Cookbook | IvyHacks Hackathon   * Worked with 2 peers to create a website which pairs users with potential meals given listed ingredients. * Used JavaScript to call recipe API and recommend recipes to users based on food they specified they already had. * Set up Firebase database for user profile storage. | [scottsut@live.com](mailto:scottsut@live.com)  (425) 615-9125  Seattle, WA  [LinkedIn](https://www.linkedin.com/in/scottsut/)  [Github](https://github.com/scottasut)  Education  University of California,  San Diego  San Diego, CA  Sept 2019 – March 2023  B.S. Data Science  Minor in Mathematics  3.63/4.00 GPA  Skills and Technologies  (In rough order of proficiency)  Java (JUnit, Log4j, Mockito, Lombok, Guava, etc)  Python (numpy, pandas, scikit-learn, pytorch, tensorflow, dask, etc)  SQL  NoSQL  Git  R (Tidyverse)  JavaScript (NodeJS, D3.js)  HTML/CSS  MATLAB  LaTex  Bash  PHP  Relevant Coursework  Data Structures and Algorithms  Data Modeling  Data Visualization  Databases  Machine Learning (Recommendation Systems, Deep Learning, Supervised/Unsupervised Learning)  Graph Theory  Statistical Testing  Calculus  Linear Algebra  Differential Equations  Combinatorics |