John Carmack

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EDUCATION

University of Tennessee

August 2017 - May 2022

Bachelor of Science in Computer Science. 3.9 GPA

Knoxville, TN

EXPERIENCE

Associate Software Engineer

June 2022 - Present

Anaplan

San Francisco, CA

- Drove the development of a Snowflake ETL connector in python that allows customers to integrate Snowflake data into business processes
- \bullet Conceptualized a new connector design which reduced the time to develop new connectors by approximately 25%
- Engineered an asynchronous notification service that utilized a Celery task queue resulting in the elimination of lost, duplicate and erroneous notifications to customers
- Led efforts to facilitate no-downtime, blue-green deployments of RabbitMQ and Redis Kubernetes clusters which eliminated a bug that caused more than 20 customer impacts a month
- Composed python scripts to automate service verification on release to reduce release timeline by 20 minutes
- \bullet Designed a far-near caching system with Redis Kubernetes clusters and memcached to cache Auth0 tokens, reducing token generation by 20%
- Supported the production implementation of the cache by an intern through 1:1 mentoring and design documents
- \bullet Built a HTTPS client used across all ETL connectors which reduced lead time for new connectors by 5%
- \bullet Analyzed and refactored existing python code to reduce the latency of many API calls by 50%
- Implemented Airflow DAGs to scrub extraneous data from databases and perform synthetic checks of services

Research Assistant

April 2020 – May 2022

University of Tennessee

Knoxville, TN

- Employed as a C++ and python software developer in a team of machine learning researchers
- Produced python packages to simulate logical gates in neural networks used across a team of 50+ scientists
- Integrated robust unit testing and CI/CD with Github Actions into the packages
- Refactored neural network processors to reduce training time by 20% which saved hours of super computing time
- Wrote utilities in C++ to facilitate neural network creation and debugging
- Developed all unit testing for the group's python and C++ code base with 80% coverage

PROJECTS

DataIngester | Python, MySQL, Pandas, Celery, Redis, RabbitMQ, Docker

April 2023 - Present

- Containerized microservice application that ingests data from publicly-available APIs
- Currently supports the SEC's EDGAR trading API
- Consumes upwards of 5 gigabytes of real-time trading data daily
- Leverages asynchronous Celery tasks to pull data from APIs and store it in a MySQL container
- Autonomous CI/CD realized with GitHub Actions to facilitate a smooth and timely release schedule

PlayMTG | Javascript, Node.js, express, MongoDB, React

April 2021 - Present

- Full stack web application to find and review trading card game stores
- Utilizes MVC model that provides REST APIs for locations, users and reviews
- Data models for MongoDB constructed with mongoose featuring one-to-many and many-to-one relationships
- Fully responsive front end realized in React

SKILLS

Languages: Python, C/C++, JavaScript, Typescript, Java, HTML/CSS, Groovy, SQL, Golang

Frameworks: React, Node.js, Flask, Django, Express, Bootstrap, Airflow, Celery Developer Tools: Git, Docker, Kubernetes, Helm, Jenkins, RabbitMQ, Redis, MySQL

Libraries: Pandas, NumPy, Matplotlib