John Carmack

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EXPERIENCE

Associate Software Engineer
June 2022 – Present

Anaplan   *San Francisco, CA*

- Spearheaded efforts to create self-serve deployments of RabbitMQ and Redis kubernetes clusters to development environments. Wrote additional unit tests for the helm charts required.
- Wrote and refactored Jekins pipelines to publish the self-serve helm charts to an internal artifactory and then deploy the clusters on development environments via harness.
- Created a proof of concept to switch from memcached to a Redis cluster to cache and share auth tokens across the project's kubernentes architecture.
- Worked to complete various tech debt tasks such as removing feature flags, refactoring unit test and creating documentation.

Undergraduate Research Assistant
April 2020 – May 2022

University of Tennessee   *Knoxville, TN*

- Developed python packages to simulate logical gates in spiking neural networks for both in-house and inter-organizational use among neuromorphic researchers. Features robust unit testing and CI/CD pipeline integration.
- Refactored existing neuromorphic processors to reduce network training time by 20%.
- Wrote multiple utilities in C++ to facilitate network creation and debugging
- Responsible for implementing and maintaining the group's C++ API in python3 via pybind11.

Undergraduate Teaching Assistant
April 2020 – May 2022

University of Tennessee   *Knoxville, TN*

- Lead multiple lab sections for courses including Data Structures and Algorithms and Systems Programming.
- Developed supplemental resources aimed at reinforcing students' understanding of course and laboratory material.

EDUCATION

University of Tennessee
Knoxville, TN

Bachelor of Science in Computer Science. 3.9 GPA   *Aug. 2017 – May 2022*

PROJECTS

Polling Web Application | *MongoDB, Express, Node.js, React.js*
2021

- Developed a full-stack web application implemented with a MERN stack. Features visualizations with D3.

PiDration | *Python, SQLite, C, Micro controllers*
2021

- Soil analytics application implemented with a threaded python3 server running on a Raspberry Pi.
- Arduino Nano micro controllers transmit soil data to server via radio transmission.
- Real-time data displayed to liquid crystal display managed by python3 server.

WordSearch | *c++*
2021

- Command-line utility that generates pdf word searches.
- Utilizes a graphing utility my favorite professor wrote as his thesis.

LightsOut! | *JavaScript, React*
2020

- Fun puzzle written in React.js.
- Try to turn off all the lights! I've never won...

TECHNICAL SKILLS

Languages: Python, C/C++, JavaScript, Java, HTML/CSS
Frameworks: React, Node.js, Flask, Express, Bootstrap
Developer Tools: Git, Docker, VS Code, Visual Studio, IntelliJ IDEA
Libraries: pandas, NumPy, Matplotlib