Royce Schultz

Software Engineer

royce.schultz@nyu.edu
GitHub, LinkedIn: royceschultz
Dual Citizen: USA & Iceland

Education

New York University

M.S. Computer Science, Cum Laude
Awarded Merit-based Scholarship
Course Assistant, Calculus (2 Sem.)
Graduated December 2022, 3.8 GPA

University of Colorado

B.S. Computer Science
Minor Applied Mathematics
Course Assistant, Calculus (4 Sem.)
Graduated May 2021, 3.5 GPA

Skills

Specialization: Git, Docker, AWS, Terraform, CI/CD, Python, JavaScript, Typescript, React, SQL, MongoDB, Rancher, Bash, Linux, Arduino/ESP

Proficiency: Helm, Jenkins, Kubernetes, Airflow, Pytorch, Tensorflow, C++, Rust, Vue, ThreeJS, MapBoxGL, D3, Automated Testing, Prometheus, Fusion360 (CAD), ROS, HPC, Jira, Code Reviews, Data Warehousing

Industry Knowledge: Geospatial Data, Digital Signal Processing, Algorithms, Computational Geometry, Robotics, Autonomous Vehicles, AI Training, GPU Accelerated Computing, CUDA, Generative AI, Large Language Models, Stable Diffusion, Agile Development, Teaching, Real-Time Programming, CNC Manufacturing, Linear Algebra

Relevant Experience

Maxar, Satellite Imagery

Software Engineer, September 2023 - Present

Developing mission critical software solutions for integration throughout the entire ground software stack.

Applying machine learning algorithms to satellite time-series metrics to expedite identification and resolution of anomalies.

Building scalable computer systems to ingest massive data streams from a growing constellation of next-gen satellites.

Deploying services and libraries with automated pipelines running comprehensive test suites to ensure reliable releases.

Enhancing software tools used to calibrate the imaging sensor that produces imagery for Google maps.

TuSimple, Autonomous Trucking

Software Engineer, May 2022 - December 2022

Contributed to software projects that support the development and operation of autonomous vehicles.

Created highly interactive 3D data visualization tools to aid downstream teams in research and validation.

Supported the successful release of a new web portal central to manage geographic markers of hazard zones.

Designed and implemented distributed data pipelines, applying computational geometry algorithms to process high-resolution map data totaling over 20 terabytes.

University Finance Lab

Research Assistant, September 2020 - May 2021

Researched natural language processing algorithms used to analyze TV news transcripts on the order of 10 gigabytes.

Applied computer vision techniques to extract textual data from 60,000 scanned financial documents.

Developed multi-processing algorithms to transform data in parallel on a supercomputer cluster provided by the University.

Amazon

Software Engineering Intern, May 2020 - August 2020

Supported infrastructure used to gather IOT device metrics that provide quantitative insights for business intelligence.

Developed algorithms to identify erroneous metrics in a massive data warehouse to ensure quality data for downstream research initiatives.