

Kaleb Burris

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Software Engineer and Sophomore at The University of Alaska Fairbanks studying Computer Science and Mathematics. Specializing in systems engineering, artificial intelligence, and recreational mathematics.

SKILLS

Programming Languages: C/C++, CUDA, Java, Rust, Python

Tools & Tech: Apache Gremlin, AWS (API Gateway, CloudFormation, DNS, DynamoDB, Lambda, Neptune, S3, Sagemaker, Secrets Manager), CLI (Bash, Nu), Docker, Git, Jira, \LaTeX , NoSQL, SQL

Machine Learning: DeepLearning4J, Machine Learning Java (Personal Project), TensorFlow

EDUCATION

University of Alaska Fairbanks

B.S. in Science. Majoring in Computer Science. Minor in Mathematics.

Fairbanks, AK

2020 – Present

Matanuska Career and Technical High School

Building Pathway. Pursuing Computer Science.

Wasilla, AK

2016 – 2020

EXPERIENCE

Alaska Satellite Facility

Student Intern

The University of Alaska Fairbanks, Fairbanks, AK

September 2022 – Present

Worked on the NASA/ESA DAAC contract related to the Sentinel-1 mission.

Sentinel-1 Superseded

REST API for end-user access to superseded data. Written in Rust and deployed on AWS.

- AWS: API Gateway, CloudFormation, DNS, DynamoDB, IAM, Lambda, S3, Secrets Manager
- Rust: Actix Web, Rocket, Serde, Tokio

Personal Projects

Multiplicative Persistence – Recreational mathematics: data science.

Arbitrary Precision – Arbitrarily large integers: memory and time optimizations.

Machine Learning Java – Machine Learning: neural networks, stochastic descent, deep learning.

Gossip Glommers – Distributed Systems: serialization/deserialization, network management, throughput optimization.

Ray Tracing in a Weekend – Ray Tracing: graphics, parallelization.