Kaleb Burris

Email: kaleb.r.burris@gmail.com
LinkedIn: kaleb-burris
GitHub: github.com/kalebvonburris

Software Enginner 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   *Fairbanks*, AK
B.S. in Science. Majoring in Computer Science. Minoring in Mathematics.   2020 - Present

Matanuska Career and Technical High School   *Wasilla*, AK
Building Pathway. Pursuing Computer Science.   2016 - 2020

EXPERIENCE

Alaska Satellite Facility   The University of Alaska Fairbanks, *Fairbanks*, AK
Student Intern   September 2022 - Present

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

Sentinel-1 Superseded
REST API for easy customer access to superseded data.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.