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.

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Sentinel-1 Superseded
REST API for end-user access to superseded data. Written in Rust and deployed on AWS.

- AWS: CloudFormation, Lambda, DynamoDB, Secrets Manager, IAM, S3, API Gateway, DNS
- 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.

SKILLS

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

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

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

Created with LaTeX