# Kaleb Burris

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## Education

**University of Alaska Fairbanks** — Fairbanks, AK
B.S. In Computer Science, minoring Mathematics — 2020 –Present

**Matanuska Career and Technical High School** — Wasilla, AK
Building Pathway, pursuing Computer Science — 2016 –2020

## Experience

**Alaska Satellite Facility** — University of Alaska Fairbanks, Fairbanks, AK
Student Intern — September 2022 –Present

- Sentinel-1 Superseded
- Created an AWS REST API, DynamoDB database; used SWE principles to create project and integrate it through GitHub actions and Docker using tools such as Jira and GitHub branching to manage issues, goals, and features.
- The project stores information on data that has been superseded by new data, creating a map where a client can query for a superseded piece of data and get the name of the piece of data that ultimately superseded it.

**Personal Projects** — 2018 –Present

- Multiplicative Persistence
- Used as a learning excircise with Java to explore computational extremes; both in terms of CPU and memory. Explored concepts such as asynchronous operations, optimization, and OOP.
- Arbitrary Precision
- A necessity of Multiplicative Persistence; storing arbitrarily large integers and decimal values in memory for use in computations, formatting, etc.
- Machine Learning Java
- A neural network and gradient descent algorithm written in Java. Applications of mathematical concepts to programming such as a Calculus, Linear Algebra, and optimization. Also explored Q-learning and Deep learning.

## Skills

- **Programming Languages:** Bash, C/C++, CUDA, Java, Rust, Python
- **Tools & Tech:** Git, LaTeX, AWS (API Gateway, DNS, DynamoDB, Lambda, Neptune, S3, Secrets Manager), SQL, Jira, Apache Gremlin
- **Machine Learning:** DeepLearning4J, TensorFlow