

Luke Gude

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Education

University of Maryland - Baltimore County

Bachelors of Science - Computer Science

GPA: 3.8/4.0 (Major) 3.2/4.0 (Actual)

Baltimore, MD

Aug 2019 - May 2023 (Expected)

Skills and Relevant Coursework

Programming Languages: *Prior experience in C++, Python, SQL, Java, Swift, Linux, Assembly*

Industry Knowledge: *Software Development, Cloud computing, Machine Learning, AWS*

Relevant Coursework: *Software Engineering I, Introduction to Artificial Intelligence, Data Structures, Discrete Structures, Design & Analysis of Algorithms*

Work Experience

Cloud Engineer

Internet2

Baltimore, MD

02/2023 - Present

- Designed, implemented and managed cloud infrastructure using AWS Serverless components, including Lambda functions, API Gateway, and DynamoDB.
- Automated tasks and monitored the health of the infrastructure using custom scripts written in Python.
- Utilized Terraform to provision EC2 instances, VPCs, and security groups, ensuring the infrastructure was managed as code.
- Implemented CI/CD pipelines using Codecommit, Github, and AWS CodePipeline.
- Conducted research and evaluated new cloud technologies to enhance the existing infrastructure, such as using ECR to manage Docker images.
- **Skills used:** *AWS, Terraform, Docker, Lambda, Python*

Software Engineer - Research Assistant

University of Maryland - Baltimore County

Baltimore, MD

11/2021 - 02/2023

- Worked with several PhD students to reduce the power consumption and travel time of clock signal distribution
- Reduced clock power by 43% using custom algorithm and patented tools
- Developed on multi-tiered system to produce a tool to simulate distributions
- Constructed multiple algorithms using complex data structures to minimize time complexity and runtime
- **Skills Used:** *C/C++, Python, Linux, Assembly*

Personal Projects

HackDuke - Hackathon

Schedule Optimizer

Durham, NC

10/2022

- Developed a web app to maximize time management for underclassmen college students
- Successfully integrated a cloud-based content management system with an existing web application, resulting in increased performance by 15%.
- **Skills Used:** *Google Cloud, PostgreSQL, Java*

Hobbies/Interests

Member of Varsity Swimming and Diving Team

University of Maryland - Baltimore County

Baltimore, MD

Aug 2019 - Present

- Demonstrated exceptional time commitment while training 20+ hours per week
- Shows great teamwork skills