# **BRIAN WALHEIM**

101 Merrybrook Drive Havertown PA 19083 267-639-8386 <u>bwalheim1205@vt.edu</u> www.linkedin.com/in/brian-walheim-8233761b6/ github.com/bwalheim1205

**Objective:** A senior computer science student seeking a software engineering position specialized in cloud, backend or full stack development starting after graduation in the spring.

#### **WORK EXPERIENCE**

**Software Engineer Co-Op, Peraton** (Jan-Aug 2022)

- Developed an end to end data analytics platform to perform ETL operations in the AWS cloud as part of a Agile software development team us
- Demonstrated use cases on the platform by developing a predictive model to identify patients likely to be readmitted 30 days using synthetic health care data
- Utilized open source and COTS tools: Apache Nifi, Apache Spark, Databricks, and Dataiku

## **Undergraduate Teaching Assistant, Virginia Tech** (Jan-May 2021)

- Assisted students in understanding course materials and assisted them with coding assignments covering C, Linux, and basic Assembly programming

### **EDUCATION**

BS in Computer Science with Minor in Cybersecurity, Virginia Tech (May 2023)

- Relevant Courses: Data Structures and Algorithms and Computer Systems
- Current Courses: Principle of Computer Security and Network Architecture and Programming
- **GPA**: 3.98 **In Major**: 4.0

#### **CERTIFICATIONS**

Amazon Web Services Solutions Architect - Associate (Expires: Aug 2025)

**Amazon Web Services Cloud Practitioner** (Expires: Apr 2025)

#### **PROJECTS**

**Undergraduate Research** (Fall 2022-Present)

- Researched a Natural Language Processing application for student-teacher evaluations for SPOT surveys at Virginia Tech as part of Dr. Gray's undergraduate research team
- Utilized common Python NLP packages such as spacy and transformers

# **Memory Allocator**

- Designed and implemented a heap memory allocator in C similar to malloc.
- Utilized a segregated free list and optimized design for heap utilization and performance.

#### **TECHNOLOGIES**

Proficient: Python, Java, C, Linux, Amazon Web Services

Familiar: Docker, Ansible, Terraform

## <u>ACTIVITIES</u>

Virginia Tech Chapter Delta Chi (Spring 2021 - Present)

- Sergeant in Arms (Spring 2022 Fall 2022)
  - Executive board position in charge of the member conduct and standards
  - Act as Risk Manager position in charge of ensuring proper safety protocols
- Community Service Chair (Fall 2021)
  - Organized canned food drive collecting 500 pounds of food for local food pantry