## **Kellen Bavis**

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### **EDUCATION**

## University at Albany, Albany, NY

Expected May 2023

B.A., Computer Science

GPA 3.89/4.00

4., Computer Science

Minor in Mathematics & Informatics

• Dean's List 2019, 2020 & 2021

**Coursework:** Discrete Structures • Data Structures • Program Hardware Software Interface • Design and Analysis Algorithm • Assembly Computer Organization • Automata & Formal Languages • Societal Ethical Implications • Operating Systems • Principles Programming Language • Calculus I, II • Calculus of Several Variables • Linear Algebra • Discrete Probability • Topics Statistical Inference

#### **SKILLS & TECHNICAL TOOLS**

Languages: Java, C, Python, SQL, HTML, CSS, JavaScript, R, and Scheme

Technologies/Frameworks: Linux, Unix, GitHub, TensorFlow, AWS, Express, React, MongoDB, and Docker

### **EXPERIENCE**

## Software Engineer Intern - Buffalo, NY

June 2022-Present

Frontier Science

- Developed a Java command-line application that performs a set of configurable consistency checks against Ingres system database tables.
- Execution of this application will send an Excel report via email containing the outcomes of the checks to specified personnel.
- Frontier Science was able to discover over 67,000 inconsistencies present between their dictionary and system tables following the execution of this program.

### **PROJECTS**

## **Interpreter** | Java

- Designed a program to execute instructions written in BASIC through the process of lexical analysis, parsing, semantic analysis, optimization, and code generation.
- Effectively reconstructed this app's functionality in the programming language C to cement the concepts related to the principles of programming languages.

# **Handwriting Detection** | Python, Machine Learning, TensorFlow

- Filtered and normalized a dataset containing 60000 images of handwritten numeric values.
- Trained a neural network with variable thresholds to predict the likelihood of a given image being a specific numeric value with 98% accuracy.

## Shell | C

- Developed a program that effectively replicates the Linux shell program.
- Implemented the concepts of I/O redirection, parsing, and the synchronization of concurrent processes.

### **Intelligent Hospital** | Java

- Designed an application that utilizes a MySQL Database and GUI to serve as an intermediate between patient and doctor functionality within a hospital.
- Requires user authentication through a unique login and password.