Miles Calloway

Tools & Languages

- **Languages:** Advanced: Python | Proficient: C# | Intermediate: C++ | Working Knowledge: Java
- **Tools:** MySQL, MS SQL, Docker, Jupyter, PyTorch, Keras, TrueNAS, QT, Flutter, AWS, Oracle Cloud

Work Experience

Ultrapak
Database Maintenance

Dunkirk, NY
2024 - 2025

- Freelance role focused on maintaining and enhancing a Microsoft Access database.
- Modified and optimized the database to meet user requirements related to a new manufacturing technique.

Brunner's Eatery
Dishwasher, Cook, Prep, Driver

Boston, NY
2019- Current

- Maintained consistent employment during college, gaining skills in teamwork, multitasking and time management.

Projects   (View more at https://mcallbos.co)

- Deep Learning Code Quality Analysis (Python, Pytorch, Keras, Jupyter, NLP) (2022-2024)
  - Developed a deep learning model for code quality analysis.
  - Researched in a self-directed fashion, allowing me to gain experience crafting a machine learning model from scratch and developing tests for them.
  - Co-authored a research paper currently under review.
- Web Based Image Enhancement Tool (JS, ONNX Runtime) (2025) - mnjer.mcallbos.co
  - Developed a browser-based platform for image enhancement using locally run ONNX-optimized image processing ML models.
  - Engineered for cross-device compatibility, supporting mobile and desktop.
- Full-Stack: Shipping Provider Simulator (Python, Flet, MySQL) (2024) - dbp.mcallbos.co
  - Designed and implemented a comprehensive UI for simulating shipping provider operations
  - Implemented backend database design and management.
- Windows System Tray Media Controls (C#) (2023) - github.com/mcallbosco/TaskplayUpdated
  - Created a fork of Taskplay with essential additional features utilizing Windows 10 Runtime APIs.
  - Implemented backend improvements for enhanced functionality.
- openpilot Car Port/Fork (Python, CI/CD, Git) (2021-2023)
  - Maintained an openpilot fork for the Honda Clarity.
  - Managed software version control and feature updates for an active user base with a constantly evolving code base.
  - Successfully merged the car port into Sunnypilot, a fork with 1,000+ active users.
- Full-Stack: SCA Web Interface (JS) (2023) - scaweb.mcallbos.co
  - Designed a web frontend for a C++ source code analysis tool.
  - Used by Fredonia University in introductory C++ programming courses.
- Team Project Management: NATracker (Python, QT3, Git) (2024) - github.com/mcallbosco/NATracker
  - Led development of a text journaling utility and coordinated contributions from multiple developers.

Education

Fredonia University
B.S. Computer Science

Fredonia, NY
Sept. 2020 - Dec. 2024

- GPA: 3.13/4.0, Dean's List - Fall 2023, Spring 2024, Fall 2024.
- Relevant Coursework: Software Engineering, Data Structures, Relational and Object Databases, Intro to Operating Systems, Intro to AI/Knowledge Engineering, Assembly Language and Computer Organization.

Eden High School

Eden, NY
2016 - 2020

- FBLA Club President; Placed 1st in statewide IT and Networking Competitions.