Nicholas J. Morris

morris.nick991@gmail.com | (513) 288-7820
nickmorr.is | github.com/nickmorris991

Education

The Ohio State University - *Columbus, OH* GPA: 3.72 (Magna Cum Laude)
B.S. Computer Science & Engineering Graduation: May 2020

Skills

- **Languages:** Java, Python, Javascript, C++, C#, C, Scala, SQL, HTML/CSS.
- **Services/Tools:** Git, Docker, Linux, Firebase, AWS, Android.
- **Frameworks:** Flask, Django, React, Scikit-Learn, Selenium, jQuery, Bootstrap.
- **Relevant Coursework:** Data Structures & Algorithms, Networking, Information Security, Mobile App Development, Database Systems, Introduction to AI, Principles of Programming (compilers/grammars).

Experience

Capital One Financial (*Summer 2019)*
Software Engineering Intern - CreditWise Team *Mclean, Virginia*

- Integrated open source data visualization tool within the company network primarily using AWS.
- Setup one click deployment architecture using Shell and Amazon Lambda, EC2, S3, and RDS to easily rehydrate an EC2 instance and migrate additional features and metadata with minimal intervention.
- Added SSO authentication via OAuth2.0 protocol to a Python Flask application for easy user login.
- Helped develop a new ETL pipeline using PySpark and Databricks to feed data from S3 to Snowflake.

NextEra Energy, Inc. (*Summer 2018)*
Data Engineering Intern - Data Systems Team *Juno Beach, FL*

- Developed analytics UI driven by Python and an internal REST API to monitor the health of servers.
- Wrote a Python script using Jupyter Notebook that leveraged natural language processing (Scikit-Learn) to automate the verification of predictive work orders. Ultimately, achieved 95% accuracy.
- Designed Python script that provided YTD analysis of newly developed AI predictive models.
- Created Python server analysis tool that helped remove time wasted on confirming daily backups.

The Ohio State University (*Jan 2018 - May 2019)*
Teaching Assistant - College of Engineering *Columbus, OH*

- Supported senior instructor in intro to object-oriented programming courses (Java) for three semesters.
- Helped lead lab sessions (30-50 students); assisted with coursework and coding problems during lab.
- Held office hours to guide students through coding projects and issues with homework.

Projects

Point-Prognostics (*Spring 2020*)

- Worked with a startup to build a web app driven by a prognostics algorithm that calculated statistical likelihood of events in a dynamic system. Interactive results displayed with chart.js plots and jQuery.
- Developed primarily using Django, JS, & Bootstrap. Backend used Matlab & their SDK dev server.
- Created extensive unit and integration tests, built into Github workflow. Powered by Selenium & QUnit.

City-Matcher (*Spring 2020)*

- Android app using Firebase Authentication and real-time database, behavioral/fragment design pattern, and device GPS sensor to match a user's personality and preferences to their perfect big city.

Network Scanner (*Spring 2020)*

- Helped design a Python tool to evaluate the topology of a network. Features included: privileged and unprivileged TCP/UDP scans, active OS detection, service detection, syn flood attack module, & more.

Mega Man Game (*Spring 2019)*

- Replica of original 2D Mega Man using state/behavioral design patterns, built with Monogame in C#.