

Matthew Garrison

Orlando, FL ◇ mail@matthew-garrison.com ◇ github.com/matthewgarrison

EDUCATION

University of Central Florida
B.Sc. in Computer Science

Expected Graduation: May 2020
GPA: 3.69

EXPERIENCE

Microsoft

May 2019 – August 2019

Software Engineer Intern

Seattle, WA

- Created a process mining custom visual for PowerBI using TypeScript, d3, and Dagre.
- Custom visual allows users to graph, filter, and perform analysis on a process.
- Custom visual performs automated analysis – setting reasonable default filter levels and detecting bottlenecks in the process.
- Used Python and R and the pm4py and bupaR libraries to experiment with various process mining techniques.

Volordige Investment Management

May 2018 – August 2018

Software Developer Intern

Jupiter, FL

- Developed a regression testing framework for an internal program used by researchers.
- Implemented functions in C# to compute exponentially-weighted, rolling-window average and variance on a stream.
- Added a new input field to an internal tool that allows the user to define custom, weighted functions.
- Used a Sparse Table and binary search to generalize a function to work on any sequence, rather than just monotonic sequences.

UCF Programming Team

Sept. 2016 – May 2018

Team Member

Orlando, FL

- Placed in the top 15% of competing students in order to join the team (based on speed and accuracy of solutions), using Java.
- 1st place in Junior/Large School division and 4th overall at 2017 Mercer contest.
- 9th place in Division 1 at 2017 Southeast Regionals.

PROJECTS

COP4520 (Concepts of Parallel Processing) Group Project

C++, RSTM

github.com/matthewgarrison/COP4520-Data-Structure-Project

- Implementation of “Scalable Lock-Free Vector with Combining” paper in C++.
- Highly scalable, parallel, lock-free vector using bounded queue for combining.

SKILLS

Languages: Java, C#, Python, TypeScript, C, LaTeX