(484) 554-8487, emp9173@rit.edu

EDUCATION

Rochester Institute of Technology

Bachelor of Science in Computer Science, May 2021

GPA: 3.43

TECH

Proficient in Python, Java, C, SQL, JetBrains IDEs, Microsoft Office Suite, Windows, Mac OSX,

Experience in C#, C++, Lua, Javascript, HTML, CSS, MongoDB, Neo4J, Git, Visual Studio, and Unity3D.

EXPERIENCE

RIT Computer Science Student Lab Instructor, Rochester NY

Jan-May 2018

Helped students understand core concepts of CSII. Responsible for writing scripts to grade labs, conducting office hours for students with questions, and helping students with in-lab exercises.

Psychological Counseling Services, Bethlehem PA

May 2016-October 2017

Performed duties of a technical assistant in developing social media automation software, implementing security features, maintaining site content, and search engine optimization.

PROJECTS

Meade LX-200 Automation Software, RIT SPEX

Designed and wrote software in Python for automation of Meade LX-200 telescope. Server device connects and sends commands, that are dictated by the client, to telescope via serial port over wireless network. Features movement with joystick and tracking of low earth orbit satellites with two line elements.

Augmented Reality Star Viewer, PERSONAL PROJECT

Designed and Implemented an Augmented Reality application that won a 2018 WWDC Scholarship from Apple. The application was created in Swift and used data from the open source HYG-Star database to create an AR walkthrough of the known universe.

Kladoi Language Compiler, SCHOOL PROJECT

As a final project for Programming Language Concepts a compiler written in Python was designed and implemented to convert a BASIC-like language to an assembly-like language. It involved building a custom lexer and recursive descent parser, as well as creating abstract syntax trees for evaluation with the parser.

Sudoku Solver, PERSONAL PROJECT

Designed and wrote software in Python for a console application that solves any 9x9 Sudoku puzzle with recursive backtracking. It was then converted into a web application using Javascript, HTML, and CSS.

ACTIVTIES

RIT Space Exploration(RIT SPEX)

Treasurer

- Responsible for managing funds of RIT SPEX.
- Conducted research on various crowdfunding techniques.

Communication Sub-System Team Leader

- Responsible for leading a team in the design of a communications sub-system for a small cube satellite.
- Gathered weather images from NOAA satellites in which antennas were designed and implemented. Wrote software for automation of process.

\$50 Satellite Team Leader

• Leading a team that is currently designing and constructing a version of a small satellite based on design from the \$50SAT - Eagle2 project.

COURSEWORK • Introduction to Software Engineering • Mechanics of Programming • Intro to Computer Science Theory • Principles of Data Management • Programming Language Concepts • Computer Science II • Discrete Math for Computing • Probability and Statistics I • Linear Algebra • Calculus II • Business Communications