Benjamin E. Jordan

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Rochester Institute of Technology Education

[Expected Dec 2022]

B.S. in Computer Science, 3.6 GPA

Programming: C#, Javascript, Java, C, Python, React, SQL, Angular, MIPS, ASP.NET, C++ Skills

Other Relevant Skills: Git, Azure DevOps, JetBrains, Visual Studio, Linux, Windows,

macOS, Unit Testing, SCRUM

Experience **SWE Internship at Carestream**

[Rochester NY, May 2022 - Present]

- Developed and maintained Carestream's ImageView clinical imaging software
- Worked as part of an agile development team
- Technologies used during this experience include C#, ASP.NET, and AngularJS

Research and Software Development Coop [Rochester NY, June 2020 - Dec 2021]

- Independently implemented software for a research project to test the effectiveness of hybrid cochlear implants
- Designed software architecture while researchers from RIT and UIowa designed each of 5 hearing tests in the program
- Participated in weekly standup meetings where software progress was demoed and critiqued
- Research poster from initial study using the software: research poster
- Implemented the Omnitone project found below as part of a separate research project with Dr. Sungyoung Kim
- Technologies used include Javascript, PHP, SQL, HTML, and CSS

Instructor at UCode Ithaca

[Ithaca NY, June 2019 - August 2019]

Taught Python and programming skills to children ages 6-13 in a group setting

Coursework

Computer Systems, Programming Language Concepts, Parallel and Distributed Systems, Cryptography, Analysis of Algorithms, Mechanics of Programming, Computer Science Theory, Intro to Software Engineering, Intro to Artificial Intelligence, Database Management, Professional Communications

Projects

Cochlear Implant Testing Software - auditoryneuro.com

- Independently developed software used to test the effectiveness of hybrid cochlear implants
- Implemented 5 round based listening tests with multiple versions of 2 tests
- Stores user data for each test in a MySQL database
- Written using Javascript, PHP, and SQL, HTML, and CSS
- Uses the JS Web Audio API extensively for sound creation and processing

Projects Cont.

Omnitone (3D Audio)

- Independently created a program that allows user to experience any sound file as if inside one of two selectable rooms
- Implemented algorithm that combines A-format ambisonic audio into 4 channel B-format ambisonic, which can be converted into a stereo format
- Includes a Pannellum VR image viewer that allows the user to rotate and change their listening position within the room
- Written using Javascript, HTML, and CSS

EQ Audio Effect

- Wrote a four filter parametric equalizer plugin for audio processing
- Successfully used the EQ inside my personal music making software
- Written using the JUCE C++ framework

Compiler/Translator

- Final project for Programming Language Concepts written in Java
- Group of 4 created compiler that takes a made-up programming language as input, analyzes it, and translates it into C, Python, or Java
- Individual responsibilities included creating the semantic analyser
- Analyser operates by creating a lookup table to store variables and user functions found in the parse tree
- It then searches the parse tree for tree node patterns (ex. return statements, func calls) and reports detailed error messages if patterns are not valid

Encrypted Messenger

- Independently created an RSA messenger for Concepts of Parallel and Distributed Systems final project
- Program sends and retrieves Base64 encoded public keys to and from a classwide server
- Uses a parallelized prime number generator to generate large RSA parameters quickly (ex. 1024 or more bits) and tests them for primality with the Miller-Rabin algorithm
- Written using C#

Portfolio Website

• Personal website created in order to practice React and market myself

Activities RIT Varsity Track and Field

[March 2019 - Present] [May 2020 - Present]

RIT EDM Club Founder & Officer

Liberty League All-Academic Team

RIT Merit Scholarship

Dean's List

Awards