## Benjamin E. Jordan

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**Education** Cornell University

[Expected Dec 2023]

M.Eng. in Computer Science

**Rochester Institute of Technology** 

[Graduated Dec 2022]

B.S. in Computer Science, Minor in Music and Technology

3.65 GPA, 3.94 GPA over final 3 semesters

**Skills Programming:** C#, Java, Javascript, C++, C, Python, Angular

Other Skills: Git, Linux, Unit Testing, Agile Development

**Experience** Research Software Developer

[RIT, Aug 2022 - Present]

- Hired part-time by RIT faculty to develop an interactive listening test while in school
- Created a program that collects data on how users interpret audio using 3D graphics
- Technologies used include Angular, Typescript, Three.js, and C#

X-Ray Software Engineering Internship

[Carestream, May 2022 - Aug 2022]

- Developed and maintained long length x-ray functionality in Carestream's ImageView software
- Used C# and worked on one of five agile development teams

**Research Software Development Intern** 

[RIT, June 2020 - Aug 2021]

- Independently implemented a program to test speech perception and the effectiveness of hearing devices for a research project with RIT and UIowa faculty
- Implemented eight training modules within the program using the JS WebAudio API
- Participated in weekly team meetings where software progress was presented
- Used to collect data for academic research (as seen here and here)

**Python Instructor** 

[UCode, June 2019 - Aug 2019]

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

Coursework

Computer Systems, Algorithms, Programming Languages, Operating Systems, Databases, Graph Theory, Machine Learning, Cryptography, Parallel & Distributed Systems, Prof. Communications, Networking

**Activities** RIT Varsity Track and Field (15-20 hrs / week commitment)

[March 2019 - Dec 2022]

RIT EDM Club Founder & Officer

[May 2020 - August 2022]

RIT AI Club Member

[September 2022 - Dec 2022]

**Awards** Liberty League All-Academic Team

RIT Presidential Merit Scholarship

**Projects** 

## **Graph Neural Network Experiment (Academic)**

- Open ended final project for Machine Learning course
- Designed, implemented, presented, and reported an experiment on PyTorch GraphSAGE model
- Proposed that utilizing multiple aggregation functions would improve model performance

## **EQ Audio Effect (Personal)**

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

## **Analyzer/Translator (Academic)**

- Final project for Programming Language Concepts written in Java
- Takes the given language as input, checks it for validity, and translates it into C, Python, or Java
- Created the semantic analyzer which creates a lookup table to store variables and user functions found in the parse tree. It then searches the parse tree for patterns (ex. return statements, func. calls) and reports detailed error messages if pattern semantics are not valid