

Benjamin E. Jordan

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[LinkedIn](#) | [Portfolio Website](#) | [GitHub](#)

Education	Cornell University M.Eng. in Computer Science - Concentration in Machine Learning & Systems	[Expected Dec 2023]
	Rochester Institute of Technology B.S. in Computer Science - Minor in Music and Technology - 3.65 GPA (3.94 avg. during second half of degree)	[Graduated Dec 2022]
Skills	Programming: Python, C/C++, C#, Java, Javascript, NumPy, PyTorch, Angular, SQL Other Skills: Git, Linux, Unit Testing, Agile Development, LaTeX	
Experience	Machine Learning Intern @ KLA	[May 2023 - Present]
	<ul style="list-style-type: none">• Researched and implemented ML solutions for semiconductor defect detection in the zeta• Leveraged transfer learning with vision transformers to improve feature extraction algos• Proposed a 2-stage cascade of binary (whether a defect exists) and multiclass (what kind of defect) classification models to improve prediction accuracy, efficiency, and interpretability• Collected and worked with raw image data	
	Research Software Developer @ RIT	[Aug 2022 - Jan 2023]
	<ul style="list-style-type: none">• Hired part-time by faculty to develop software for spatial audio research during the semester• Independently created a program for collecting data on how users interpret audio• Technologies used include Three.js, Angular, and Typescript	
	Software Engineering Intern @ Carestream	[May 2022 - Aug 2022]
Coursework	<ul style="list-style-type: none">• Developed and maintained C# back-end functionality in Carestream's ImageView X-Ray software• Solved major issue allowing users to take long-length x-rays with incorrect settings• Worked as a member of an agile software development team	
	Research Software Developer @ RIT	[June 2020 - Aug 2021]
	<ul style="list-style-type: none">• Independently designed and implemented software for a speech perception and cochlear implant research project with RIT and UIowa faculty• Created 8 listening test modules using Javascript and the Web Audio API• Participated in weekly team meetings where software progress was presented• Data collected from the program was used to produce multiple research publications	
	ML:	Adv. Machine Learning, Reinforcement Learning, Artificial Intelligence, Natural Language Processing, Large Scale Machine Learning, Mathematical Foundations of Machine Learning, Artificial Intelligence
	Sys:	Operating Systems, Networking, Cryptography, Parallel Computing, Distributed Systems, Adv. Computer Architecture
Activities	RIT Varsity Track and Field (15-20 hrs / week commitment) RIT AI Club Member	[March 2019 - Dec 2022] [September 2022 - Dec 2022]
Awards	RIT Presidential Merit Scholarship Liberty League All-Academic Team	
Projects	DSLabs	
	<ul style="list-style-type: none">• Created a distributed key-value store using the DSLabs Java framework• Implemented Paxos for replica group consensus, 2PC to achieve atomic commit for distributed transactions, and dynamic load balancing of shards to handle server reconfiguration	
	EQ Audio Effect	
	<ul style="list-style-type: none">• Wrote a four filter parametric equalizer plugin using the JUCE C++ framework• Successfully used the EQ inside personal music making software	
	Graph Neural Network Research Project	
	<ul style="list-style-type: none">• Designed, implemented, presented, and reported an experiment on the graph sage architecture• Proposed that using mean-pooling aggregation for the initial layers of our model would improve performance compared to using only max-pooling for all layers	