# Jacob Yoon

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#### EDUCATION

# Rochester Institute of Technology

Rochester, NY

Combined Bachelor of Science and Master of Science in Computer Science

August 2021 - May 2026

- Cumulative GPA: 3.88/4.0
- Relevant coursework: Machine Learning, Parallel and Distributed Systems, Programming Language Concepts, Database Management, AI, Algorithms, Mechanics of Programming, Intro to Software Engineering, CS Theory

### EXPERIENCE

# Software Engineer Intern

Rochester, NY

Dassault Systèmes

June 2024 - December 2024

- Led the development of full-stack automation tools using **Angular** and **Node.js** to seamlessly integrate Jira with internal issue tracking software, saving project managers and dev leads 3-5 hours per week.
- Developed full-stack solutions for user stories and resolved critical bugs with .NET, Angular, and PostgreSQL, enhancing the 3DEXPERIENCE platform's material tracking and reporting capabilities for enterprise users.

# Software Engineer Intern

Ithaca, NY

Dassault Systèmes

May 2023 - December 2023

- Overhauled legacy application search functionality using **Angular** and **.NET**, improving search performance by over 90% and enhancing user experience.
- Optimized .NET endpoints for improved Oracle database interactions for overall system efficiency.
- Developed internal tools with **Angular** and **Express** to automate data generation for application environments.
- Created a CI/CD pipeline with GitLab and Docker, streamlining the deployment processes.

#### Student Lab Instructor

Rochester, NY

RIT Department of Computer Science

August 2022 - December 2022

- Assisted 24 students taking CSCI-140 (CS for AP Students) with lab assignments and problem solving sessions.
- Provided help with **Python** and **Java** to teach vital computer science concepts.
- Mentored over 100 introductory-level CS students in the GCCIS Tutoring Center.

#### Projects

#### **Audio Spheres**

November 2024 - December 2024

audio-spheres.web.app | github.com/jyoon926/audio-spheres

- Designed and developed an innovative music discovery web app using **React** and **Spotify Web API** that visualizes user music taste through an interactive, branch-based interface with pan and zoom navigation.
- Implemented cloud persistence with **Firebase**, enabling users to save and manage multiple visualization trees.

#### Models @ RIT

July 2024 - October 2024

<u>modelsatrit.com</u> | https://github.com/jyoon926/modelsatrit

• Created a platform to connect photography students with models at RIT, using React and Supabase.

# Retrieval Augmented Generation (academic)

March 2024 - May 2024

- Researched 7 papers on retrieval augmented generation, transformer architectures, and large language models.
- Replicated results from original papers using **Python** and the **Hugging Face Transformers library**, and implemented modifications to enhance the model's performance.

# SKILLS

Languages: TypeScript/JavaScript, Python, Java, C#, C, C++, HTML/CSS, SQL

Frameworks/Libraries: Angular, React, Next.js, .NET, Node.js, Express, Spring, Tailwind CSS

AI/ML: TensorFlow, PyTorch, Hugging Face, NumPy, Pandas

Tools: Supabase, Firebase, PostgreSQL, Oracle, MariaDB, AWS, MongoDB, Docker, Jenkins, Postman, Figma