

Joseph A. Celtruda

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EDUCATION

Rensselaer Polytechnic Institute

Troy, NY

Master of Science in Computer Science, GPA 4.0

January 2026 - Expected December 2026

Bachelor of Science in Computer Science, GPA 3.62

August 2022 - December 2025

- **Coursework:** AI/ML, Distributed Systems, Database Systems, Data Structures, Algorithms, Cloud Computing

SKILLS

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

Tools & Frameworks: React, Next.js, Node.js, FastAPI, Django, LangChain, Git, Docker, Linux, GitHub, Claude Code

Databases & Cloud: AWS (S3, EC2), GCP (Cloud Storage, SQL, Run), Postgres, Supabase, Firebase, Vercel, Render

WORK EXPERIENCE

Jahnel Group

June 2026 - Present

Software Engineer Intern

Schenectady, NY

- Engineered a full-stack ATS (Next.js, Postgres) with resume upload, parsing, and AWS S3 storage, **saving \$20K annually**.
- Launched the platform to process 700+ daily applications, optimizing hiring workflows for recruiters and interviewers.
- Designed a points-based swag store with audit logging and role-based Firebase Auth serving **200+ global employees**.
- Built CI/CD pipeline in GitHub Actions, running automated tests per PR and deploying Docker images to Cloud Run.

TE Connectivity

May 2025 - August 2025

Software Engineer Intern

Winston-Salem, NC

- Architected Node.js microservices and APIs (MQTT/HTTP, Postgres) to process **10,000 sensor data points per minute**.
- Built a real-time alert dashboard (Bootstrap) for **100+ users** to track machine health, downtime, and alert history.
- Developed an Android alerting app (Flutter, Socket.IO/WebRTC push-to-talk), improving operator response times **by 6x**.

P1ston

May 2025 - August 2025

AI Engineer Intern (Part-Time)

Remote

- Fine-tuned open-source LLMs (Llama 4) using Hugging Face Transformers library for supply chain document processing.
- Engineered extraction prompts with chain-of-thought and multi-shot techniques, achieving **100% validation accuracy**.

Hudson River Community Credit Union

May 2024 - August 2024

Management Information Systems Intern

Corinth, NY

- Developed data pipelines in Python using Pandas and REST APIs to process and geocode **100K+ data points**.

PROJECTS

RPiGPT | Python, React, FastAPI, ChromaDB, PyTorch

- Deployed a chat platform (FastAPI) grounded in course materials to deliver class-specific support to **7,000+ students**.
- Implemented vector search and RAG pipelines with ChromaDB and PyTorch for low-latency, high-relevance responses.

Rehab Games | Django, JavaScript, MediaPipe

- Developed webcam-controlled rehab games that gamify shoulder therapy using MediaPipe for motion tracking.
- Built a full-stack web app with a Django backend and JavaScript frontend supporting leaderboards and difficulty modes.

Lung Cancer Detection Using Convolutional Neural Network | Python, PyTorch

- Developed and trained a CNN using PyTorch to classify CT lung scans as cancerous or non-cancerous.
- Achieved **0.982 F1 score** and 98.3% accuracy with **1% false negatives** via custom grayscale and contrast enhancements.

LEADERSHIP EXPERIENCE

Theta Xi Fraternity

December 2024 - December 2025

President

- Led a **50+ member organization** with a **\$300K budget**, overseeing operations, governance, and risk management.
- Secured the Theta Xi *Memorial Trophy* as the top national chapter (**1 of 44**) for the first time in **78 years**.