Anton Rudnytskyi

Software Engineer | Computer Science student
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EDUCATION & RESEARCH

University of Nebraska at Omaha | B.S. Computer Science | GPA: 3.76

Expected early graduation: December 2027 | Second-year student

Course load: two semesters at 18 credits and one at 16. Considering a Mathematics minor.

Undergraduate research, Prof. S. Song (2026-27): secure messaging, moving toward AI/LLM work.

Certification: Oracle Certified Associate, Java SE 8 Programmer I (1Z0-808)

EXPERIENCE

Software Engineer | Bar-IQ

Aug 2024 - Present | Remote

Computer-vision inventory system for bars and restaurants.

- Designed, built, and deployed the full product, from ML models to production infrastructure; running a production pilot across 7 bar locations.
- Fine-tuned SAM-family segmentation models with LoRA to estimate liquid levels in bottles from photos, with 97%+ volume-estimation accuracy.
- Built and deployed the production backend: FastAPI, PostgreSQL (AWS RDS), S3, Stripe billing, and serverless GPU inference.
- Built a native iOS app in Swift with NFC-based inventory scanning, after an early React Native/Expo prototype, plus an analytics platform for multi-location management.

Software Developer Intern | Gainesville City Board of Education

Aug 2023 - May 2024 | Gainesville, GA

- Developed software to streamline Chromebook distribution and returns across schools.
- Updated and maintained Chromebook software for students.

SELECTED PROJECTS

MPS School Information Chatbot

Current project stack: Python | OpenAI API (GPT-6 Luna, text-embedding-3-large, vision) | Claude Haiku | OpenRouter (Jev) | ChromaDB | BM25 | Flask/SSE | SQLite | Selenium | PyMuPDF | Ollama | pytest

- Team project for Millard Public Schools. Retrieval covers 44 district and school sites, scanned PDFs, Drive files, and calendars: about 98K chunks, rebuilt with one command.
- Hybrid vector/BM25 search, per-school partitions, LLM reranking, cited answers, and fact-checking; refuses unsupported answers.
- A 162-question evaluation set with a 3x LLM judge and cost tracking. An A/B test selected a reranker about 9% cheaper and 2x faster at the same measured quality.

multiagents - Claude Code plugin | Private repository

Lead model plans and reviews; lower-cost workers implement. Used by the Bar-IQ team. Developing a successor with Claude Code orchestration and Codex implementation.

Rowan: RTX 5090 home assistant with speech, vision, a local LLM, and WebSocket room clients. **Bible Reader:** Swift iOS app with translation and AI explanations. **footymodel:** Poisson-based Premier League goal prediction.

SKILLS

Languages: Python, Swift, Java, JavaScript/TypeScript, SQL

AI/ML: Computer vision, LoRA fine-tuning, SAM, YOLO, Whisper, LLM tool use

Backend & cloud: FastAPI, PostgreSQL, AWS (RDS, S3), Serverless GPU inference, Stripe, Git

Familiar with: React, React Native, PHP

Spoken languages: English, Ukrainian, Russian

AWARDS & PROGRAMS

1st, City Programming Olympiad (Ukraine); 27th of ~1,000, Kyiv Programming Olympiad (Ukraine).

2nd, ACTE Georgia State Team Coding Competition; 3rd, Hall County Schools Team Coding Competition.

Inspirit AI (Stanford/MIT) program participant.