Nicholas J. Colotti

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EDUCATION

Cornell University, College of Engineering   Ithaca, NY

Bachelor of Science in Computer Science, Minor in Operations Research   Expected May 2025

TECHNICAL SKILLS

- Python, Java, SQL, C, OCaml, Tableau, AWS (Lambda, Kinesis, CloudWatch, IAM)

PROFESSIONAL EXPERIENCE

Amazon   Seattle, WA

Software Development Engineer Intern   May 2024 - August 2024

- Collaborated with an internal services team to develop secure tooling for various teams across Amazon, enhancing overall operational efficiency
- Implemented an end-to-end commenting feature in an AWS security service, enabling detailed command execution tracking for contingent authorization purposes
- Created integration tests for the commenting feature, leading to its successful launch into the beta development pipeline

Cornell University   Ithaca, NY

Teaching Assistant, CS 4320: Introduction to Database Systems   August 2024 - Present

- Conduct weekly office hours to clarify complex topics and assist students with problem-solving
- Support students in mastering relational database design, SQL, and data modeling concepts through one-on-one and group interactions

Communications and Collaborative Technologies Lab   Ithaca, NY

Research Assistant   June 2023 - August 2023

- Collaborated with cross-functional team to design and implement experiment focused on the impact of non-verbal cues in virtual reality environments
- Utilized BioPac equipment to collect and analyze physiological data, including heart rate, skin conductance, and respiration, providing insights into user responses during VR interactions

PROJECTS

Data Science for Social Services Team   January 2024 - May 2024

- Partnered with Adoption Share Inc. to analyze the AFCARS dataset, providing recommendations for company expansion into new states to improve child-parent matching
- Leveraged Tableau to design impactful data visualizations, highlighting key statistics on children in the U.S. foster care system

Yahtzee Game   February 2023 - May 2023

- Worked with a team of four to design, implement, and test a 1,600-line OCaml version of the classic dice game, Yahtzee
- Developed a tiered difficulty algorithm to simulate players, enhancing user engagement

Cornell Scheduling Team   October 2022 - December 2022

- Developed an integer programming model to adjust exam schedules, minimizing overlap
- Integrated new code into existing Python script to output a schedule with 51% fewer conflicts