Noah Rebei

nr285@cornell.edu github.com/nrebei2 nrebei2.github.io/

Education

Cornell University **August 2021 – Present**

B.S. in Computer Science, Overall GPA: 3.9, Major GPA: 3.95 *Ithaca, NY*

Relevant courses:

- Operating Systems
- Computer Graphics
- Backend Development
- Discrete Structures
- Functional Programming
- Formal Verification
- Analysis of Algorithms
- Computer System Organization
- Number Theory
- Computer Game Development
- Machine Learning
- Advanced Programming Languages
- Foundations of Robotics
- Database Systems
- Networks
- Signals and Systems
- Reinforcement Learning*
- Distributed Computing*

**In Progress*

Skills

Technologies: Python, OCaml, C/C++, Java, Coq, Rust, HTML/CSS/JavaScript
Tools: SQL, Linux, Git, LaTeX, VS Code, Mathematica, Unity, Jupyter Notebook, ROS

Experience

Cornell - Teaching Assistant **August 2022 – Present**

Classes taught: *Ithaca, NY*

- CS 3110 - Data Structures and Functional Programming
- CS 4410 - Operating Systems
- CS 4110 - Programming Languages and Logics

Marsh McLennan **June 2023 – August 2023**

Junior Application Developer Intern *New York City, NY*

- Created an automated process for the creation and signing of non-negotiated agreements inside Marsh.
- Developed REST API endpoints using Java SpringBoot which integrated with Quadient API service for efficient document generation, with testing done using Mockito framework.
- Integrated with DocuSign eSignature, enabling seamless electronic agreement signing while ensuring legal compliance.
- Built an end-to-end service using Microsoft Power Platform: Power Apps with UI for intuitive agreement initiation and completion, and Power Automate for a cohesive workflow connected to the various services developed.

Cornell Cup Robotics **February 2023 – June 2023**

Member *Ithaca, NY*

- Member of group working on a semi-autonomous lab assistant (C1C0) that could navigate and map out its surrounding environment.
- Enable C1C0 to respond intelligently to a spectrum of different questions and commands through speech-to-text and face recognition systems.
- Utilize machine learning and natural language processing through APIs such as Google Cloud's Speech API.

Virtual Embodiment Lab **August 2021 – January 2022**

Research Assistant *Ithaca, NY*

- Collaborated with team to design and run a study involving pairs of student participants, studying the effects of social support in virtual environments on pain perception.
- Recorded data for human participants once per weekday on average.

Neutron Measurement Laboratory **June 2019 – April 2021**

Research Assistant *Champaign, IL*

- Carried out research with the Neutron Measurements Laboratory, a lab group specializing in advancing radiation measurements for security at the University of Illinois at Urbana-Champaign.
- Utilized hands-on laboratory work and the use of Monte Carlo computer simulations to develop new methods of measuring radiation from nuclear materials in pipes.
- Developed scripts using Python and Mathematica to perform quantitative data analysis and produce figures for use in a first author publication:
  - N. Rebei, M. Fang, and A. Di Fulvio, "Quantitative and three-dimensional assessment of holdup material." *Nucl. Instrum. Meth. A* **984** (2020) 164630

Test Scores

American Invitational Mathematics Examination - March 2020
Score: 8