# **Donovan Gamboa**

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# **Software Engineering**

Bilingual, third-year engineering student seeking to transition project experience and academic learning to a co-op position. Demonstrated ability to collaborate with team members to design, implement, and test software programs. Fluent in Spanish. Open to relocating.

Core Competencies: Agile Methodologies | Incremental Software Engineering Practices | Networking | Math | Physics

Programming Languages: Python, Java, C, C++, JavaScript, HTML, CSS, Web API, SQL, MATLAB, MySQL

Other Technical Skills: Embedded Systems, Microsoft Office (Word, Excel, PowerPoint, Access, Teams), Shell, Windows, Apple,

Linux, GitHub

## Education

ROCHESTER INSTITUTE OF TECHNOLOGY, Rochester, NY – Bachelor of Science, Software Engineering

Expected 05/2025

Minor in Mathematics; Minor in Quantum Information Science and Technology

Dean's List: Fall 2020, Spring 2020

Clubs: Electronic Gaming Society (2021-Present) | Circle K (2020-Present)

# **Academic Projects**

#### ROCHESTER INSTITUTE OF TECHNOLOGY, Rochester, NY

Project: Bank Simulator

03/2023 - 04/2023

- Developed and tested stand-alone program to simulate workflow in typical banking environment on Nucleo-L476rg platform, using C; managed parallel processing and synchronization through concurrency mechanisms.
- Designed program architecture, ensuring modularity, separation of concerns, and adherence to best practices.
- Deployed customer queue and 3 teller threads to assign customers to available tellers.
- Displayed real-time metrics and calculated and reported end-of-day metrics such as total customers served and wait times.

Project: Chat Service

08/2021 - 09/2021

- Collaborated with team of developers to design and implement entire back end of project using Python, SQL, and MySQL.
  Optimized performance and data retrieval algorithms by identifying and resolving bottlenecks in database queries.
- Created robust database schemas and utilized SQL queries to store and retrieve user information and chat logs.
- Implemented secure user authentication and authorization mechanisms for data privacy and access control.
- Integrated back-end functionalities into user interface with front-end developers to. Tested and debugged application.
- Used agile methodologies to iteratively develop and enhance application, incorporating user feedback and adding features.
- Documented back-end architecture, database schemas, and API endpoints to facilitate maintenance and development.

## Work Experience

#### ROCHESTER INSTITUTE OF TECHNOLOGY, Rochester, NY

#### Intern - Innovation Fellows Program

06/2023 - Present

- Led team in developing Jira API prototype for Miner Repair, streamlining ticketing, invoicing, and reporting.
- Communicated project updates and requirements, ensuring client satisfaction.
- Demonstrated prototype's capabilities to client, fostering collaboration and gathering feedback.
- Orchestrated seamless integration with Jira board, enabling direct updates from the program.

#### **Course Assistant - Software Design for Computing Systems**

01/2023 - Present

- Conduct review and study sessions for students; explain assignments and provide guidance on complex topics.
- Assist professor in developing materials, preparing projects, and grading assignments, quizzes, and homework.

# Student Staff - Grace Watson Dining Hall

09/2021 - Present

- Verify and scan student I.D. cards and complete purchase transactions with various forms of payment.
- Trained ~20 new student employees in processes and procedures, expediting acclimation and increasing efficiency.

Prior Experience: Warehouse Worker/Driver - Norwescap, Phillipsburg, NJ, 07/2019 - 12/2021