

Eric Modesitt

17 Gladwin Place, Bronxville, NY 10708 ericjm4@illinois.edu, (646) 647-7113

EDUCATION

University of Illinois at Urbana-Champaign, Urbana-Champaign, Illinois

Bachelor of Science, Bioengineering, Present, GPA: 3.96, Expected Graduation Date: 05/25

Google Professional Certificate Training Program, Remote

Completion of Google Data Analytics Professional Certificate, Data Analytics, 10/21

PROFESSIONAL EXPERIENCE

Google Summer of Code Collaborator, Ontario Institute for Cancer Research

Jun. 2022 - Present

- Designed and created an interactive Angular web application from scratch to visualize biological pathways
- Integrated Julia code into Angular application to view results of MP-Biopath algorithm (In progress)
- Plotted unique pathway visualizations using Cytoscape and D3 to display results of the MP-Biopath Algorithm (In progress)

Undergraduate Researcher, Bhargava Lab, Beckman Institute

May. 2022 - Present

- Interfacing C# and MATLAB code to post-process spectrophotometer data in real-time
- Creating a GUI to view and interact with the parameters and data produced by this interface
- Interfacing C# directly with Function Generator to iteratively modify the data collection process

Undergraduate Researcher, Gritton Lab

Jan. 2022 - May 2022

- Updated ViRMEn (Virtual Reality MATLAB Engine) to work with current versions of MATLAB
- Connected ViRMEn to data acquisition pipeline and physical setup for experimentation.

Teaching Assistant, PieCorp. Remote

Sep. 2021 – Jan. 2022

- Developed curriculum for introductory level Computer Science class
- Evaluated student and teacher performance based on Agile and Scrum frameworks
- Worked on a team of 3 to improve student satisfaction and performance
- Communicated complex and abstract ideas to further develop students' technical knowledge

Software Engineering Intern, Soluna Computing, New York

Jun. 2021 – Aug. 2021

- Configured the remote shutdown of crypto miners to optimize energy consumption based on weather conditions
- Designed and formed a data-collection pipeline through a RESTful API
- Created explanatory dashboard to display live data through Tableau
- Performed data analytics on past data to extract insights on performance and predict future results

TECHNICAL SKILLS

Programming Skills: Python, Java, C++, SQL, MATLAB, Pytorch, Tensorflow, Rust, Javascript (Angular, MobX), Julia

Non-Programming Skills: Excel, Tableau, LaTeX

Spoken Languages: English (Fluent), Spanish (Proficient)

RELEVANT COURSEWORK

MATH 415 (Linear Algebra), MATH 285 (Differential Equations), MATH 241 (Calculus III), CS 173 (Discrete Structures), MCB 150 (Molecular and Cellular Biology)

EXTRACURRICULARS/AWARDS

Academic: National Merit Finalist, Senior Award for Excellence in Mathematics, AIME Qualifier, James Scholar

Leadership: High School Math Club and Chess club Co-chair, Eagle Scout, NYLT training

College Extracurriculars: Involvement in ACM, SIG AIDA (A.I. and Data Analytics), ActiveMinds member, Taekwondo, Running