Eric Modesitt

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EDUCATION

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

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

Google Professional Certificate Training Program, Remote

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

PROFESSIONAL EXPERIENCE

Bhargava Lab, Beckman Institute

Undergraduate Researcher *May. 2022 - Present*

- Interfaced C# and MATLAB code to post-process spectrophotometer data in real-time
- Creating and integrating firmware to be used for controlling a bioprinter (In progress)
- Developing Artificial Intelligence algorithms to automatically maximize the efficiency of a bioprinter (In progress)

Ontario Institute for Cancer Research

Google Summer of Code Collaborator *Jun. 2022 - Sep. 2022*

- Designed and created an interactive Angular web application from scratch to visualize biological pathways
- Plotted unique pathway visualizations using Cytoscape and D3 to display results of the MP-Biopath Algorithm

Gritton Lab

Undergraduate Researcher *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.

PieCorp

Teaching Assistant, *Sep. 2021 – Jan. 2022*

- Evaluated student and teacher performance based on Agile and Scrum frameworks
- Improved student satisfaction and performance on a team of teachers
- Communicated complex and abstract ideas to further develop students' technical knowledge

Soluna Computing

Software Engineering Intern *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 (Functional)

RELEVANT COURSEWORK

MATH 415 (Linear Algebra), MATH 285 (Differential Equations), MATH 241 (Calculus III), CS 173 (Discrete Structures), CS 225 (Data Structures)

EXTRACURRICULARS/AWARDS

Academic: James Scholar, ISUR Scholar

Leadership: Eagle Scout, NYLT training

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