# Vernetta J Huang

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## **Education**

Cornell University | Masters of Engineering in Computer ScienceExpected Dec. 2025Cornell University | B.S. in Computer Science, Minor in Information Science | GPA: 3.83Expected May 2025

## **Technical Skills**

Languages: R, SQL, Python, Java, C, Swift, MATLAB, HTML/CSS, JavaScript, OCaml

Frameworks and Technologies: NumPy, Pandas, PyTorch, TensorFlow, Matplotlib, React, jQuery, Bootstrap, Flask, Tableau, Git

**Skills:** Data Analytics, Databasing, Artificial Intelligence, Algorithms & Data Structures, Object-Oriented Programming, Functional Programming, Statistical Analysis, Operating Systems, Natural Language Processing, Computer Graphics, Full Stack

# **Experience**

# **Data Analytics & Web Development Intern**

May 2024 - Aug. 2024

New England Biolabs | Ipswich, MA

- Conducted statistical analyses and data visualization on social media and e-commerce sales data, deriving 100+ actionable insights to enhance SEO, optimize costs, and drive sales growth. Utilized Tableau, Google Analytics, and Databricks.
- Merged 10 country-specific domains into a unified domain, reorganized backend data parsing and directory.
- Designed interactive data dashboards for internal teams, enabling self-service analytics to address key business questions.
- Developed and implemented data-driven solutions to enhance website user experience, increasing sales and user activity.

# Wiki and Design Subteam Lead & Advisor

Nov. 2022 - Present

International Genetically Engineered Machine (iGEM) Project Team | Ithaca, NY

- Led team of 40 in building a website and developing an online game to achieve Gold Medal Classification at the International iGEM Grand Jamboree for two consecutive years.
- Redesigned team website to align with rebranding, increasing number of team applicants by 2.5x to over 150 students.
- Developed and taught training projects, improving technical skills with 97.5% of the team reporting increased effectiveness.

#### Academic Excellence Workshop Facilitator

Aug. 2022 - Present

Engineering Learning Initiatives | Ithaca, NY

- Taught 5 courses in Computer Science Organization and Differential Equations to classes of 20+ students.
- Developed instructional materials, including lessons, presentations, and worksheets, to facilitate student learning.

## **Projects**

# Platform Moderation to Mitigate Harm of Viewing Ableist Text with LLMs

Jan. 2025 - Present

Research group examining disability-related discrimination, focus on online safety, accessibility, and AI. Developing web-based prototype, implementing APIs, running quantitative analysis and statistical modeling.

# **COMMIT Tuberculosis Data Analysis on Catastrophic Costs**

Oct. 2024 - Dec. 2024

Data analysis to quantify the financial strain tuberculosis imposes on households and highlight potential areas for intervention.

## **Mathematical Equation Solver Using Image Recognition**

Jan. 2024 - May 2024

A math solver that takes in an image of a math equation (handwritten or printed) and outputs the solution. Focus on AI techniques including image recognition, image segmentation, and use of existing databases to improve accuracy and efficiency.

HeartBeat Jan. 2024 - May 2024

Platform rhythm-style desktop game developed in LibGDX, handling backend and design, utilizing SCRUM/Agile Methodology.

Sorry! Mar. 2023 - May 2023

Terminal version of the board game Sorry! using OCaml and JSON. Created 300+ test cases to ensure correctness. Focus on processing lists, encapsulation and modules.

## Leadership

**Cornell E.Motion** | Media Chair & Senior Advisor

Sep. 2021 - Present

Cornell Taiwanese American Student Association | Mentor

Sep. 2021 - Present

United Abacus Arithmetic Association (UAAA) | Teacher & Senior Advisor

Jun. 2017 - Present