# Vernetta J. Huang

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#### **EDUCATION**

Cornell University | Masters of Engineering in Computer Science
Cornell University | B.S. in Computer Science, Information Science (UX) and Education Minor | GPA: 3.83

Expected Dec. 2025

Expected 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, Computer Graphics

#### **EXPERIENCE**

## Data Analytics & Web Development Intern

May 2024 - Aug. 2024

New England Biolabs | Ipswich, MA

- Conducted statistical analyses and data modeling on social media and e-commerce sales data, deriving actionable insights to optimize search engine performance, achieve cost savings, and increase sales.
- Merged multiple 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 100% of the team reporting increased effectiveness.

#### **Academic Excellence Workshop Facilitator**

Aug. 2022 - Present

Engineering Learning Initiatives | Ithaca, NY

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

## **PROJECTS**

#### **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 art design, utilizing SCRUM/Agile Methodology.

#### **RISC-V Processor and Interpreter**

Nov. 2023

Implemented a single-cycle processor that supports RISC-V instructions in Logisim and a RISC-V interpreter in C. Created 300+ test cases to ensure correctness.

Sorry! Mar. 2023 - May 2024

Terminal version of the board game Sorry! using OCaml and JSON. 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