

Vernetta J Huang

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Education

Cornell University Masters of Engineering in Computer Science	Expected Dec. 2025
Cornell University B.S. in Computer Science, Minor in Information Science GPA: 3.83	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, Natural Language Processing, Computer Graphics

Experience

Data Analytics & Web Development Intern New England Biolabs Ipswich, MA	May 2024 - Aug. 2024
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- 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 International Genetically Engineered Machine (iGEM) Project Team Ithaca, NY	Nov. 2022 - Present
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- 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 Engineering Learning Initiatives Ithaca, NY	Aug. 2022 - Present
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- Taught 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

COMMIT Tuberculosis Data Analysis on Catastrophic Costs Data analysis to quantify the financial strain tuberculosis imposes on households and highlight potential areas for intervention.	Oct. 2024 - Dec. 2024
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Mathematical Equation Solver Using Image Recognition 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.	Jan. 2024 - May 2024
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HeartBeat Platform rhythm-style desktop game developed in LibGDX, handling backend and design, utilizing SCRUM/Agile Methodology.	Jan. 2024 - May 2024
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RISC-V Processor and Interpreter 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.	Nov. 2023
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Sorry! Terminal version of the board game Sorry! using OCaml and JSON. Focus on processing lists, encapsulation and modules.	Mar. 2023 - May 2024
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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