Ethan Carty

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EDUCATION

University of Connecticut (UConn)   **Storrs, CT**
- Bachelor of Science in Data Science & Engineering   Expected May 2026
- Minor in Mathematics   GPA: 3.7/4.0
- Relevant Coursework: Transformers, Software Engineering, Databases, Systems Programming, Algorithms & Data Structures

EXPERIENCE

Cornell Tech (Cornell University)   **New York City, NY**
Research Assistant (REU), under Dr. Wendy Ju   May 2024 – Present
- Analyzed and interpreted research data using quantitative methods from 2 ethnographic studies on the cultural differences of interactions between drivers and pedestrians to derive interesting insights and become an author
- Spearheaded a work-in-progress paper that combined RTK GPS with motion capture technology for pedestrians and cars which allowed real-time data collection with <1 millimeter of error on their movements
- Built a model that detected when drivers and pedestrians gestured to each other trained on data from the simulator

Miao Embodied AI Lab (University of Connecticut)   **Storrs, CT**
Research Assistant, under Dr. Fei Miao   August 2024 – Present
- Performing quantitative research in collaboration with Cornell to develop and enhance robust reinforcement learning algorithms for collaborative perception to be implemented in connected automated vehicles and smart cities
- Engineering small autonomous cars to test RL algorithms with a Jetson NANO and ROS 2 for lane detection

Hillside Ventures   **Storrs, CT**
Incoming Analyst   *January 2025 - Present*
- Analyzing potential investment opportunities in SaaS startups by examining management, growth rate, and risk to ultimately aid in investing the over $1 million in capital available to the team

Medtronic   **North Haven, CT**
Sustaining OPS Engineering Intern (Surgical Robotics Division)   June – August 2023
- Fine-tuned a CNN (YOLO) that bounds surgical sutures in real time for data analysis of surgeries with 98% accuracy
- Developed and validated a PowerShell script using agile methodology that troubleshoots 31 embedded systems in over 100 surgical systems which is now utilized by >200 quality engineers to save ~10 minutes every troubleshoot

PROJECTS

Subreddit Classifier   March – May 2024
- Fine-tuned an NLP transformer (RoBERTa) that classified the top ten most likely subreddits to contain information related to a prompt by encoding 250k samples from a dataset we cleaned with an evaluation accuracy of 18%

Pet Adoption Website   September – December 2024
- Engineered a website as a part of a 3-person team using React and Docker that simulated adopting pets by connecting the frontend to a SQLite database, as well as implemented account and log-in features to streamline user experience

LEADERSHIP

Prometheus Ventures   **Cambridge, MA**
Co-founder   September 2024 – present
- Co-founding a venture capital fund and accelerator to power innovative ideas through partnering with brands such as J.P. Morgan and Haus to offer a platform and marketing strategies to startups through TEDx and independent events

Werth Institute for Entrepreneurship and Innovation   **Storrs, CT**
Werth Innovator   August 2024 - Present
- Fostering entrepreneurial skills with a competitive group of 11 students by meeting with executives and school faculty

SKILLS

Software: Python (Pandas, Sklearn, PyTorch, Numpy, Plotly, Matplot, Tensorflow) C, React, TypeScript, ROS 2, SQL, Jupyter/VSCode, Unix & Linux, Docker, Microsoft Office (Excel), Raspberry Pi, Robotics, Computer Vision
Activities: Executive Board – Sigma Phi Epsilon Fraternity (Chaplain) | Member – RunUC (Club Track & Field)