

# Jerry Wang

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## Education

### Master of Science in Applied Machine Learning

University of Maryland - College Park

Exp. May 2026

College Park, MD

- **Relevant Coursework:** Computer Vision, ML Algorithms, Natural Language Processing, Robotics, Optimization

### Bachelor of Science in Computer Science, Minor in Cognitive Science

Rutgers University - New Brunswick

May 2023

New Brunswick, NJ

## Skills

**Programming Languages:** Python, C++, C, Java, MySQL (Proficient)

**AI/ML Frameworks:** PyTorch, Torchvision, TensorFlow, Scikit-learn, YOLO, OpenCV, Hugging Face, Gen AI

**Cloud & Infrastructure:** Docker, Kubernetes, AWS (S3, EC2, Lambda), Azure, GitHub

**MLOps & Tools:** LLM, ClearML, CUDA, RESTful API, CI/CD, Linux, Unreal Engine

## Projects

### Autonomous Vehicle Simulator | Python, PyTorch, OpenCV, TorchVision, YOLO, Unreal Engine

Jun 2025 – Present

- Implemented **multi-modal Sensor Fusion** using **computer vision (TorchVision)** and **LiDAR data** to support autonomous vehicle decision-making
- Achieved **real-time perception** by **30 FPS** by integrating **YOLO** (You Only Look Once) to **CARLA Simulator's API** for **object detection** and **image segmentation**
- Increased traffic component **classification accuracy** by **60%** by removing ambiguity and training a **CNN model** for classifying traffic lights

### NYC Ambulance Dispatch Simulation | PuLP, Osmnx, NetworkX, GeoPandas, Matplotlib

Mar 2025 – May 2025

- Reduced response times by **18%** across **200+ daily dispatch** events by developing a hybrid routing solution with **Dijkstra's algorithm** and **PuLP linear programming**
- Enhanced ambulance dispatch efficiency by **75%** by **modeling 50K+ NYC map** with real-time emergency simulation using **GeoPandas** and **NetworkX**
- Improved operational efficiency by building **interactive Matplotlib simulations** for live monitoring of emergency services performance metrics and enabling data-driven dispatch decisions

## Experience

### Software Engineer Intern

Oct 2020 – Aug 2021

Eslite Bookstore

Taipei, Taiwan

- Accelerated **data retrieval times** by **30%** by streamlining an e-commerce platform with **AWS** through large-scale **data cleaning** of **100K+ dataset**
- Reduced QA cycle time by **20%** and post-release defects by **40%** by building Python end-to-end **test automation** for checkout and product listings
- Prevented **40%** of server outages by orchestrating incident response across engineering teams and integrating **AWS CloudWatch** for early detection

### Software Engineer Intern

Jun 2019 – Aug 2019

Acer

Taipei, Taiwan

- Achieved **95%** image classification accuracy on **100K+ datasets** by designing, training, and deploying a **CNN** integrated with **Azure pipelines** for real-time detection
- Reduced AGV navigation errors by **35%** by integrating a classification system on **Raspberry Pi** with real-time sensor streaming to **Azure IoT** for low-latency path optimization
- Drove company-wide adoption of edge ML practices by designing and leading an **industrial AI deployment** workshop for 30+ engineers

## Certification

Building Toward Computer Use with Anthropic

Aug 2025

NVIDIA AI Infrastructure and Operations Fundamentals

Jul 2025