# Ryan Lagasse

203-859-2345 | ryan.lagasse@uconn.edu | www.linkedin.com/in/lagasse-ryan | https://github.com/RyanLagasse

## EDUCATION

**University of Connecticut College of Engineering** **2025**
*Computer Science and Mathematics*
- Coursework: *Computer Science, ML, Stats, Transformers, and research in Machine Learning, NLP, and LLMs*
- Activities: Co-founder of Quant Club, SWE with HuskyDevs, MLOps with AI club, Data Science Club

## TECHNICAL SKILLS

- *Computer Languages:* Python, SQL, Java, C, C++, Rust, MatLab, HTML5/CSS3/JS, Typescript
- *Tools:* Git, PyTorch, TensorFlow, pandas, AWS, numpy, Scikit-learn, HaDoop, Kafka, Azure, PowerBI, Spark, AWS
- *Skills:* Algorithm and app development, machine learning, data science, data pipelines, Agile (Scrum/Kanban)
- Strong OOP skills, LLM and DL model finetuning, ML stack design, data analysis/querying/modeling

## WORK EXPERIENCE

**Co-Founder, *Lead AI/ML Engineer,*** *RapidResponse, Storrs, CT* *2023*
- Developed advanced simulation and autonomous systems with 97% simulation accuracy
- Designed an autonomous decision-making system using a zero-shot CNN to land 98% within 5 feet
- Leading a team of 10 engineers to iterate through prototyping, testing, and refinement of drone hardware

**Co-Teacher of Introduction to Transformers CSE 4095,** *Uconn College of Engineering, Storrs, CT* *2023-24*
- Teaching my accredited Uconn course on transformers focusing on self-attention and finetuning models
- Developed and delivered weekly lectures on new transformer architectures on models like BERT, GPT-3, Mistral

***Generative AI Researcher***, Hubbell Incorporated, Remote July 2023
- Lowered response errors of Gen-AI models by 46% with prompt injection and fine-tuning
- Trained LLMs on 10-Q and 10-K financial documents to build FMs and perform advanced financial analysis

***Machine Learning Engineer***, Hubbell Incorporated**,** Avon, CT Summer 2023
- Built ML failure prediction models for testing for 7M+ Aclara electric meters with 99% accuracy
- Designed Teams bot using my models and Llamas to work through observations with the test engineers
- Tool is in use and saves hours of senior engineer's time and uses incremental learning to adapt to new updates

## RESEARCH EXPERIENCE

**UCONN CSE Department**, *Deep Learning Researcher, Storrs, CT* 2023
- Won first place in accuracy and fourth place overall at TinyML Design Contest at ICCAD
- Developing a cutting-edge CNN and deep learning algorithm for the classification of life-threatening ventricular arrhythmias (VAs), addressing the primary cause of Sudden Cardiac Death (SCD)
- Improved the accuracy of our model up to 98% accuracy and lowered the model latency significantly using C

## PROJECTS & LEADERSHIP EXPERIENCE

**Deep Learning Model and Natural Language Analysis of Stocks,** *Lead Developer* 2023
- Designed deep learning model to analyze news positivity compared to stock pricing with 95+% accuracy
- Program uses finetuned Huggingface models to explain trends from the model to users with 87% reliability
- Achieved a 30% improvement in data retrieval and analysis by optimizing my SQL database

**Vision Tracking Robot** *Developer* 2022
- Developed a vision tracking protocol using CNNs , PID controls,and predictive motion algorithms to shoot balls into a goal with 82% accuracy
- Implamented deep learning techniques to improve shot accuracy achieving 96% accurate trajectory maps