

Sathwik Yarlagadda

Master's Student and Co-Founder of Oni Technologies

980-222-1117 | me@sathwikyarlagadda.com | linkedin.com/in/syarlag | sathwikyarlagadda.com

EDUCATION

Rice University

Master of Computer Science, Concentration in AI

Houston, TX

May 2025

University of North Carolina at Charlotte

Bachelor of Science in Computer Science, Concentration in Data Science, Summa Cum Laude

Charlotte, NC

December 2023

EXPERIENCE

Freelance Software Developer

Bionics Systems

June 2024 – Present

Waxhaw, NC

- Developed a React Native mobile application with Expo from scratch to manage bonus data across **59 franchise stores** leading to a **16% increase** in bonuses
- Implemented Microsoft authentication through Supabase for over **50 users**, enabling secure user login and dynamic role-based access to store-specific data
- Boosted manager engagement by replacing dense Power BI visualizations with intuitive data displays and filtering options, resulting in a **45% rise in app usage** for decision-making across stores, areas, and districts

Software Engineering Intern

Patient Xpress

May 2023 – Aug. 2023

Laguna Niguel, CA

- Built a Python pipeline to process **400+ customer voicemails weekly**, transcribing audio using OpenAI Whisper and categorizing feedback with a fine-tuned BERT model, reducing manual sorting time to **under 1 hour per week**
- Fine-tuned a BERT model for voicemail categorization by annotating **~1,200 voicemail transcripts** using Label Studio, enabling precise classification into operationally relevant categories (e.g., appointment requests, complaints)
- Documented and modularized the pipeline to support seamless integration with more advanced models or LLM APIs like OpenAI, enabling future improvements without significant re-engineering

Undergraduate Teaching Assistant

University of North Carolina at Charlotte

Jan. 2023 – May 2023

Charlotte, NC

- Evaluated **100+** student assignments and projects, providing constructive feedback to enhance understanding and improve class performance
- Assisted **40+** students in identifying and resolving Java coding errors, improving their debugging skills and promoting independent problem-solving through assignments
- Conducted weekly office hours, helping **over 20** students deepen their comprehension of course topics

PROJECTS

ParanoidPicks Sportsbetting Platform | Next.js, React, TypeScript, Supabase

Oni Technologies LLC

May 2024 – Present

- Built a full-stack website using Next.js and Supabase providing user authentication, data management, and real-time updates
- Improved notification visibility by 60% as measured by user engagement metrics, by implementing authentication through Discord and building a custom Discord Bot for real-time notifications
- Streamlined subscription management by 35% through integrating Stripe
- Increased admin task efficiency by 50% through developing advanced admin features for user and data management

Learning Rate Scheduling Experiments for Machine Learning | Python, PyTorch, sklearn

Rice University

March 2024 – May 2024

- Achieved a 5.2% improvement in CIFAR-10 classification accuracy using Chebyshev fractal learning rate schedules compared to traditional decay-based schedules
- Reduced training time by 18% for MNIST classification by applying fractal learning rates, achieving over 98% accuracy within fewer epochs than baseline methods
- Improved R² scores by 7% for California Housing regression tasks than standard approaches
- Conducted experiments with custom ResNet-18, CNN, and dense network architectures on datasets with varying complexity and documented findings in a research paper, outlining the experimental setup and effectiveness of the proposed learning rate schedules

Oni Trade Sync | Python, Typescript, FastAPI, Electron, React, PostgreSQL, RabbitMQ, AWS

Oni Technologies LLC

June 2023 – Present

- Enabled subscription-based automatic trading by designing and developing an internal API with FastAPI and a Desktop Application built with Electron and React
- Accomplished a 5-second end-to-end trade execution time by deploying to AWS EC2 with Github Actions CI/CD pipeline
- Implemented login, signup, and other user features with Supabase to sustain over 50 monthly active users
- Increased user engagement by 45% measured by interaction metrics, by providing custom Discord alerts to provide relevant trade execution updates tailored to individual users

TECHNICAL SKILLS

Programming Languages: Python, JavaScript, TypeScript, HTML/CSS, Java, SQL (MySQL & PostgreSQL), C++, C

Frameworks and Libraries: Node.js, React, Electron, Next.js, React Native, Jupyter, Flask, FastAPI, TensorFlow, PyTorch, scikit-learn (sklearn), Langchain, Pandas, NumPy, Matplotlib

Databases: MongoDB, MySQL, PostgreSQL

Developer Tools and Cloud Platforms: Git, Docker, Expo, RabbitMQ, Google Cloud Platform (GCP), Amazon Web Services (AWS), OpenAI API (LLMs)