

# RYAN PARAPPURAM

rparappuram@gmail.com | 832-797-0743 | [linkedin.com/in/ryanparappuram](https://www.linkedin.com/in/ryanparappuram) | [cs.utexas.edu/~rpara](https://cs.utexas.edu/~rpara)

## EDUCATION

### The University of Texas at Austin

Expected May 2026

- **MS Computer Science**, Integrated Program
- BS Computer Science
- Certificate in Applied Statistical Modeling
- Minor in Business
- GPA: 3.81

## SKILLS

- **Programming:** Java (6 yrs), Python (4 yrs), C/C++ (4 yrs), JavaScript (5 yrs), HTML/CSS (5 yrs), SQL, GoLang
- **Certifications:** Oracle Certified Associate *Java SE 8 Programmer*, AWS Certified *Cloud Practitioner*
- **Web Development:** Flask (4 yrs), Spring Boot (5 yrs), Next.js (3 yrs), React (4 yrs), LAMP/MERN Stack, MySQL
- **Cloud Technologies:** Amazon Web Services (AWS), Google Cloud Platform (GCP), Docker, Kubernetes
- **Operating Systems:** Windows, macOS, ChromeOS, Unix, Linux, Ubuntu
- **Tools & Platforms:** Visual Studio, Eclipse, Git (GitBash/GitHub/GitLab), Jira, Confluence, Bitbucket, Atlassian
- **Data Science & Machine Learning:** TensorFlow, Keras, PyTorch, Scikit-learn, OpenCV, ROS, Pandas, Kaldi

## EXPERIENCE

### Integral Development Corp., Palo Alto, CA

June 2023 - Present

#### Artificial Intelligence (AI) Intern

- Created a document-based Q&A **chatbot** with OpenAI API, boosting company-to-customer interactions by 40%
- Designed an **AI-assisted risk management** solution using LLM function calling, automating risk management trades via company APIs, enhancing accuracy by 15%
- Developed **predictive analysis algorithms** with scikit-learn for FX trade volume and P&L estimation
- Deployed full-stack applications to AWS using **EC2**, VPC, and API Gateways for secure and scalable setups, integrating with GitHub, Jenkins, and HAProxy for continuous integration and deployment

### Nordstrom, Seattle, WA

June 2022 - August 2022

#### Software Engineer Intern

- Developed **full-stack** web app to track a sequenced history of every product data change for retail partners
- Engineered data partitions to improve query efficiency by 35% on **petabytes** of data in Amazon QLDB and S3
- Leveraged React, Redux, Google Charts, and AG Grid for UI design; Java Spring Boot for backend REST API

### Cornerstone Logistics, Austin, TX

February 2022 - May 2022

#### Software Engineer Intern

- Automated **PDF generation** for construction bid requests and line item orders, increasing operational efficiency
- Integrated **DocuSign eSignature** REST API into mobile app, streamlining the signature process

### ConstructConnect, The Woodlands, TX

July 2019 - August 2019

#### Programming Intern

- Hosted a user profile database in **Google Cloud Platform** using Cloud Shell, achieving 99.9% uptime
- Conducted comprehensive **product testing** across multiple operating systems, identifying **50+** critical issues
- Created an **authenticated** website in JavaScript using ReactJS, improving user login experience

## PROJECTS

### Stock Trading Algorithm

March 2024 - June 2024

- Implemented and fine-tuned a **swing trading** strategy utilizing RSI and **dynamic trailing stop** loss orders based on ATR to optimize for market volatility, achieving an average **65%** annual profit
- Automated deployment and monitoring using AWS CodePipeline, AWS CloudFormation, AWS Lambda, AWS CloudWatch, and AWS SNS for real-time error notifications and SMS alerts

### Credit Card Approval Prediction

November 2023

- Developed a predictive machine learning model to forecast credit card approval outcomes with **95%** accuracy
- Leveraged **Neural Networks**, KNN, and Random Forest models, fine-tuning parameters with cross-validation

### pintOS: UTCS Operating Systems Project

August 2022 - December 2022

- Implemented multiple kernel modules including basic interrupts, thread schedulers, user process handling, and a fully functional file system based on FFS