

# PRINCE AHMED

☎ (919) 358-3940    💻 princeahmed.dev    ✉ princeahmedjobs@gmail.com    🌐 princeahmed1    📱 prince-ahmed

## Education

### Duke University

Class of 2024

*Bachelor of Science in Computer Science and Physics minor*

*Durham, NC*

- **GPA: 3.959/4.0** and **4.0** Major GPA
- **Karsh International Scholar:** 1 of 5 out of the student body to receive a full ride merit based scholarship of \$340,000.
- **Coursework:** Machine Learning, Algorithms, Advanced Networks, Databases, Special Relativity, Quantum, Probability.
- Duke Applied Machine Learning, Men Rowing Team, Modern Dance, Guitar, Photography, Low Income First Generation

## Skills

**Programming Languages:** Python, JavaScript, Java, Swift, C, Ruby, SQL, Scheme

**Technologies:** Ruby on Rails, React Native, React, Docker, Git, VS Code, Jira, Nginx, SpaCy, Pandas, Linux, SciPy

## Work Experience

### Finesse Formula LLC - Recly

May 2023 – August 2023

*Software Engineer Intern*

*Naples, FL*

- Redesigned home screen sections to allow users to find partners and future workouts immediately.
- Reduced React Native app load time by **60%** by refactoring several initial NestJS API calls.
- Added multi language support which resolved a common pain point for customers representing **35% in ARR**.
- Spearheaded marketing to college sports club which led to **43% of new users**.
- Pioneered a back-end development environment overhaul, boosting team productivity by **25%** (number of weekly PRs).

### Duke Office of Information and Technology

May 2022 – August 2022

*Software Engineer Intern*

*Durham, NC*

- Automated the time-consuming process of grant proposal review by comparing the cosine similarity of embedding vectors of 20,000+ PDFs to identify the most similar ones, facilitating funding allocation and academic collaboration.
- Led team of 6 in architecting a Transformer Natural Language Processing (NLP) pipeline that achieved a **94% accuracy score** on the tests set - over passing client's expectations and subsequently tasked with developing a web app.
- Deployed a secure and efficient web app by integrating university authorization system, configuring team's Docker image and maintained the GitLab CI/CD pipeline through a Linux VM in a DevOps role.
- Efficiently managed the software development process using Jira, conducting stakeholder interviews, defining requirements, setting acceptance criteria, and assigning tasks for weekly sprints to team members.

## Projects

### Restaurant Recommendation App | React, Ruby on Rails, PostgreSQL, Swift

January 2023 - Present

- Led a team of 5 in the development of an app with \$7000 raised that aims to solve the difficulty that groups face when choosing a restaurant with diverse dietary preferences in a new place.
- Crafted a prototype and executed comprehensive user testing resulting in a remarkable **91% user satisfaction rate** from **600+ people** on Duke campus and London.
- Designed efficient Rails REST APIs enabling the Swift app to search, create dining groups, and voting on restaurants.
- Integrated a generative AI chatbot into the messaging platform, reducing average group decision-making time by 30%.

### Machine Learning to Predict Airline Delay | Python, SciKit Learn, Kaggle

October 2022 - December 2022

- Developed web app that given a flight, it predicts a delay probability, and provides historical delay/airport data - used by 1000+ students across Duke to check their flights back home.
- Implemented Support Vector Machine ML model on 5 years' worth of US flight data to predict delays.

## Research

### Ring Attractor Model Research Assistant | Python, Object Oriented

January 2022 - May 2022

- Collaboratively in team of 2 to create a Python representation of a network model consisting of over 200 neurons.
- This model was developed to facilitate experiments in the lab, exploring its reactions under various conditions and stimuli. Our efforts aimed to verify the claims made in a referenced paper.

## Leadership

### Undergraduate Teaching Assistant

January 2023 – Present

- **Discrete Math** - Lead recitation for 30 students where I foster collaboration and lecture more complex material.
- **Server Side Web App** - Hold office hours and tailor new projects with the professor for a class of 70.

### DevOps, DUU

September 2022 – Present

- Redesigned the WXDU radio website to show in real time the songs and DJs playing with song queue automation
- Developed Duke@Nite Trivia App through firebase and react.js used by 1200+ students at events to play trivia games.