

AARYA VULUPALA

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EDUCATION

Rutgers University

B.S. in Computer Science & B.S. in Data Science — GPA: 3.64 / 4.0

Coursework: Data Structures and Algorithms, Computer Architecture, Information and Database Management, Discrete Structures, Linear Algebra

New Brunswick, NJ

Expected May 2028

EXPERIENCE

Rutgers Solar Car Team

Software Engineer

New Brunswick, NJ

August 2026 – Present

- Built a free **Python** and **Google Apps Script** sponsor outreach tool to automate fundraising, with a **local LLM** to fit our tight budget, using a ranking algorithm to prioritize likely responders based on past sponsors, emailing **1.5K+** sponsors and growing funding from **\$100** to **\$2,000+**
- Built a QR code check-in tool where members scan to update a live attendance dashboard that automatically reports to the team president
- Analyzed **22** telemetry channels (speed, RPM, drag, GPS) and **20** rival team datasets with **NumPy**, **pandas**, and **Databricks** to run physics-based race simulations with anomaly alerts, helping engineers design a faster, more efficient car and boosting simulated race speed by **14%**

IpserLab

Software Engineer Intern

Remote

June 2026 – August 2026

- Shipped **15+** full-stack features in **Java**, **React**, and **PostgreSQL** for a tech-transfer platform used by **25+** research offices, including REST API endpoints and database changes, while fixing front-end bugs and adding safety checks that block prompt-injection attacks on the AI chatbot
- Spearheaded a switch from the old **JavaMail** setup to the **Brevo API** for **~5K** monthly emails, after diagnosing why Microsoft-hosted inboxes were rejecting messages, cutting bounce rates by **60%** and making email delivery more dependable for every research office on the platform
- Implemented notification settings in **React** using Slack, **Twilio**, and Brevo APIs, letting users pick email, text, or Slack alerts in one place

Aljon's Grill Pizzeria & Restaurant

Freelance Software Engineer

Plainsboro, NJ

June 2025 – August 2025

- Built a **Python/SQL** pipeline that consolidated **5K+** orders from **5** sales channels (DoorDash, online, phone, in-person) into one **PostgreSQL** database, cutting weekly reporting from **3** hours to **10** minutes
- Developed a **Next.js/React** web app with **HTML/CSS** where **15+** non-technical kitchen staff log stock and waste daily across **50+** ingredients
- Added sales and inventory views that showed the owner which items were over-ordered, cutting food waste by roughly **\$30** per day

PROJECTS

Dormly — Campus Marketplace Platform | *Next.js · React · AWS S3 · PostgreSQL · Clerk*

shopdormly.com

- Founded and built Dormly end to end, a full-stack campus marketplace where students buy, sell, find roommates, join clubs, and message each other in-app, using **Next.js** and **React** for the Home, Browse, Listing Detail, Messages, and Profile pages, all in one place for students
- Architected a **PostgreSQL** database for **14** listing categories and **7** campus hubs (jobs, roommates, course swaps), with search filtered by campus
- Integrated **Clerk** for secure user sign-up and login and **AWS S3** for image uploads, with uploads locked to a dedicated folder for added safety

The Chop Shop — Barbershop Booking Platform | *Next.js · React · Supabase · PostgreSQL · Stripe*

barbershop-booking-ochre.vercel.app

- Designed and deployed a **Next.js/React** booking website on **Vercel** for my barber business, handling **60+** appointments and **\$1.5K+** a month
- Launched an AI support chat on the free **Gemini API**, guided by a custom prompt with details about the barbershop to keep chats on topic
- Reduced scheduling time approximately **80%** by letting clients book and pay with **Stripe**, while **Supabase** and **PostgreSQL** track appointments
- Cut no-shows **34%** by implementing the **Resend API** to automate email reminders sent to clients before each appointment

NBA Prospect & Career Predictor (ML) | *Python · scikit-learn · XGBoost · TensorFlow · SHAP*

github.com/aaryavulupala/nba-predictor

- Constructed a **Python** pipeline merging **5,589** prospect records from **4** scraped sources, cutting data errors **93%** with automated **pandera** checks
- Benchmarked **7** models, incl. **XGBoost** and **TensorFlow**, on **25** draft classes; tuned XGBoost hit **79%** within-1-tier accuracy vs. **50%** baseline
- Boosted macro-F1 **57%** on held-out draft classes by creating **63** features, using **SHAP** to show age, steals, and BMI as top drivers of career tier

LEADERSHIP

Blueprint

Software Engineering Fellowship Education Director

New Brunswick, NJ

September 2026 – Present

- Instructed **100+** students, designing a full curriculum on system design, data structures, algorithms, HTTP, REST, and runtime complexity
- Wrote hands-on labs in **Python**, **FastAPI**, and **SQL**, mentoring fellows on REST API design, login security, database modeling, and scalability

Iota Nu Delta Fraternity, Inc.

President

New Brunswick, NJ

April 2026 – Present

- Led the nation's largest Iota Nu Delta chapter, driving **33%** membership growth and allocating a **\$25,000** budget across **12** roles twice a year
- Directed weekly chapter meetings for **40** members, setting short-term and long-term priorities and delegating work across **12** officer positions

SKILLS

Languages: Java, Python, JavaScript, TypeScript, SQL, C, HTML/CSS

Libraries/Frameworks: React, Next.js, Node.js, Spring Boot, FastAPI, pandas, NumPy, scikit-learn, XGBoost, TensorFlow

Cloud/Databases: AWS (EC2, S3, RDS, Lambda), PostgreSQL, MySQL, Firebase, Supabase, REST APIs

Tools: Git, GitHub, Databricks, CI/CD, Postman, Claude Code, Codex, Cursor