Ved Borade

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Education

Rutgers University - Honors College **New Brunswick, NJ**
B.S. Computer Science & B.S. Data Science **Expected May 2027**

- **Awards:** 5x Hackathon Winner, 2x STEM Showcase Gold Medalist, 2x National CyberScholar, Dean's List, CodePath Scholar, DTCC Rising Star
- **Relevant Coursework:** Data Structures, Computer Architecture, Linear Algebra, Data 101, Discrete Structures

Technical Skills

Languages: Python, Java, C, C++, Swift, SQL, JavaScript, GML
Frameworks & Libraries: React, SwiftUI, UIKit, TensorFlow, PyTorch, OpenCV, NumPy, Pandas, Matplotlib, Scikit-learn, XGBoost, Plotly
Hardware/Embedded: Arduino, Raspberry Pi, ESP32, FPGA, Bluetooth, IoT, I2C/SPI, Soldering, CAD, EasyEDA
Developer Tools: Git, Firebase, Xcode, Android Studio, Jupyter Notebook, Chipyard, Gurobi, AWS, JUnit, GDB

Experience

Aresty Research Assistant | Computational Robotics @ Rutgers PRACSYS Lab **Aug 2025 – Present**
- Developing Integer Linear Programming (ILP) and Gurobi algorithms for shelf placement on the UR5 robotic platform.
- Engineering a 3D data pipeline to map retail datasets into simulation instances to maximize label visibility.
- Applying Python/Plotly for performance evaluation and collaborating with PhD researchers to present visibility benchmarks and Reinforcement Learning (RL) baselines in weekly technical meetings.

Apple Inc. | Specialist @ Apple – Freehold, NJ **Jul 2025 – Oct 2025**
- Generated over $100,000 in revenue by providing tailored product solutions and technical guidance to customers.
- Diagnosed software/hardware issues and performed pre-appointment troubleshooting for Genius Bar appointments.

MIT Lincoln Laboratory | BWSI ASIC Design Scholar @ Lexington, MA **Jul 2023 – Dec 2023**
- Designed an ASIC chip for air quality monitoring using Chipyard; mentored students as a Teaching Assistant.
- Developed and pitched a $10,000 funding proposal to a panel of industry experts from SOFWERX.

Jetson | Product Intern **Jun 2023 – Aug 2023**
- QA tested beta features achieving 0 production bugs and prototyped wireframes in Figma and Swift.
- Contributed to features increasing daily engagement by 5% and day-one retention by 9%.

NYU Tandon School of Engineering | Cyber Security Program @ Brooklyn, NY **Jul 2022 – Aug 2022**
- Utilized custom Python scripts to perform network analysis, identifying security threats and anomalies in systems.
- Reverse-engineered malware samples to understand behaviors and develop detection methods.

Projects

Epi-Sense (Wearable Seizure Detection) | ESP32, C++, Firebase, Swift **Hackathon Winner**
- Developed a biometric wearable for real-time seizure detection with Firebase-integrated iOS/Watch alerts.

Robotic Service Dog | Arduino, C, Ultrasonic Sensors, 3D Printing **STEM Showcase Gold Winner**
- Engineered an autonomous service robot featuring a custom-programmed robotic hand and indoor navigation.

NBA Player Longevity Model | Python, Scikit-learn, Pandas, XGBoost **Data 101 Capstone Project**
- Built a machine learning model to predict NBA player longevity with 91.45% accuracy.

Leadership & Activities

Rutgers Org. of Cloud Computing (ROCC) | Executive Board Member **Jan 2026 – Present**
- Spearheading cloud curriculum development to upskill members in AWS and Azure architecture.

Road to Silicon V/Alley (RSVP) | Cohort 7 Member **2025 – Present**
- Selected for technical leadership training featuring intensive C-Suite mentorship and startup modeling.

National Computer Science Honor Society | President **Sep 2022 – Jun 2024**
- Coached lessons in engineering and circuitry for 50+ students; designed a 4ft Santa animatronic display.

Volunteering

NASA International Space Apps Challenge | Technical Mentor **2023 & 2024**
- Advised participants at a global hackathon for 93,000+ registrants across 150+ countries.

Invited Judge | Regional STEM Competitions **2022 – Present**
- Evaluated engineering prototypes and software for Liberty Science Center and science fairs.