Atul Errabolu

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EDUCATION

University of Texas at Austin, Incoming student (Expected Graduation: 2025) Austin, TX

- Computer Science, GPA: 4.0
- Relevant Coursework: M408N (Calculus I), M408S (Calculus II), M408M (Calculus III), M 3HRS (Discrete Math), CS 312 (Intro. to Programming)

Vista Ridge High school, 2017 - Current Cedar Park, TX

- Unweighted GPA: 4.0/4.0; Weighted GPA: 4.0/4.0; Rank: 6/551 (Top 1.08%)
- SAT: 1540; NMSQT Index: 218 - National Merit Commended Finalist
- Highlighted AP Scores: AP Computer Science (5), AP Physics C: M (5), AP Physics C: E&M (5), AP Calc BC(5), AP Chemistry (5), AP Macroeconomics (5)

Stanford Algorithms Specialization, 2020

- Maintained A average in the 4 courses within the specialization: Certificate

SKILLS

- **Languages:** Python, JavaScript, Java, Dart, HTML, CSS
- **Experience with:** Flask, Django, Flutter, Keras, NLTK, TextBlob, SQLAlchemy, p5.js, Bootstrap, Stripe API, DialogFlow, Alpaca API
- **Knowledge:** Object-oriented design, Data structures and Algorithms, Web design, API design, conceptual understanding of System Design/Scalability, basic ML and NLP.

EXPERIENCE

Mathnasium, 2020 - Current Round Rock, TX

Math Instructor

- Taught kids ranging from ages 5-17 on math topics such as Geometry, Algebra, Pre-calculus, and Statistics.
- Onboarded new instructors and taught them how to interact with students, use the teaching software, and any math concepts they needed to refresh upon.

VRHS Robotics Team, 2018 - Current Cedar Park, TX

Software Lead

- Developed open source Java applications and created algorithms intended to control robots both autonomously and manually for the FTC robotics competitions.
- Utilized various open source libraries such as OpenCV and Vuforia, 2 computer vision libraries, to increase accuracy of autonomous tasks by over **80%** and increase speed of task completion by **30%**.
- Led software team members to deliver project requirements and implement applications with proper software design paradigms.

HIGHLIGHTED SOFTWARE PROJECTS

1. **Zooba**: Course Management Site (Python, HTML/CSS, JS, Flask, SQLAlchemy) – I scraped my school's grade databases to build a site where users can automatically compute their GPA, get course recommendations and friend recommendations based off user course interest, and receive assignment notification.
2. **RoboVest**: Investment Robo Advisor App (Dart, Flutter, JavaScript, Stripe API, Dialogueflow, Alpaca API) – I am currently developing an app where users can chat with robo-advisor to learn about finance and then deposit money using Stripe to strategically invest in various asset classes.
3. **Dijkstra Visualizer:** (JavaScript and p5.js) **–** I Implemented the Dijkstra's shortest path algorithm with an interactive graph environment.
4. **Chess** (Java) **-** I designed Chess and implemented AI using the Minimax algorithm.
5. **SummarizeIt**: Text Summarizer (Python, NLTK, TextBlob) **–** I created a python module that would summarize article links.