Royce Arockiasamy

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EDUCATION

Georgia Institute of Technology   Atlanta, GA
Junior, BS in Computer Science, Minor in Mathematics   *2021 – 2025*

South Forsyth High School   Cumming, GA
Class Rank: 1 of 597, Varsity Tennis, VEX Robotics Worlds Qualifier, Musician, National Beta Scholarship Recipient, Co-Captain of Science Olympiad, Governors Honors Program Finalist, Published Scientific Researcher, Presented at SCUDEM EXPO Conference, First Place at Technology Student Association (TSA) National Conference, USACO Platinum

EXPERIENCE

Data Scientist   May 2023 - Present
RightData   *Atlanta, GA*
- Optimized search engine for global search using AI langchain-based vector embedding search functionality with Neo4j.
- Helped develop SaaS Control Plane platform using React, Nile, and Pulumi (spinning instances in AWS, Azure, and GCP).
- Developed novel algorithm for Emory using Amazon Textract that extracts data from any page matching a geometric template, regardless of page orientation, resolution, or scanned position.
- Developed lineage for data products across source and targets for data governance using pipelines.

Mobile Application Developer   Summer 2022
International Child Art Foundation   *Washington, D.C.*
- Collaboration with UX and management teams to design and develop a mobile application to save event dates and information for the World's Children Festival.

DevOps & SWE Intern   Summer 2021
Meals by Grace   *Atlanta, GA*
- Used AWS to develop an Inventory Management system using DBMS and SQL.
- Built a working Transactions system that allows staff to add/edit/delete items, containers, and storage locations.
- Developed a forecasting tool using charts graphs to graphically represent inventory data.

PROJECTS

Schematic Optimization of PCB | *C++, Boost, MATLAB*
- Novel Applied Combinatorics project optimizing the schematic intersections on a PCB (Printed Circuit Board)
- Used C++ to develop and code planar embedding and possibility exclusion algorithms to produce optimized PCB models

PushUpCounter | *Python, Tensorflow, Machine Learning, Artificial Intelligence, JavaScript*
- Software program that counts push-ups using AI and works on any device
- Project placed first at the Technology Student Association State Leadership Conference

ReSearch | *Chrome Extension, Machine Learning, Artificial Intelligence, TensorFlow, HTML/CSS/JavaScript*
- Coded custom QNA Machine Learning model to answer questions with over 96% accuracy
- Developed chrome extension that allows users to receive answers to the questions they ask based on the content of a page

Beta Club Website | *Node.JS, Cloud APIs, HTML/CSS/JavaScript, GitHub APIs, SEO Management*
- Serving over 500+ members
- Frontend website showcasing the club, volunteering opportunities, etc with compatibility on all devices
- Backend using a database to log attendance and track hour submissions with an admin portal to approve/reject statuses

MIT Battlecode | *Java, Mathematical modeling, Artificial Intelligence, GameDev Algorithms*
- Coded autonomous virtual robots in Java using AI, pathfinding, distributed algorithms, and communications

Reserve My Court (Open-Source) | *PHP Web Server, HTML/CSS/JavaScript, UI/UX, React*
- Coded a dynamic website for users to reserve Tennis courts with a calendar layout
- Compatible on both mobile and laptop devices and runs on a PHP Web Server File Database system

CERTIFICATIONS

TestOut PC Pro Certification | *Hardware, Software, Security, and Troubleshooting*   Issued 2022
Programming in HTML5 with JavaScript and CSS3 | *Frontend and Backend Web Development*   Issued 2019

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL, HTML/CSS/JavaScript, Kotlin, PHP, Bash, C#, Swift, Go, TypeScript, MATLAB
Technologies: React, Angular, TensorFlow, Node.js, Docker, SSH, Express, Flask, .NET, Flutter, Bootstrap, Material UI
Tools: Git, AWS, Google Cloud, Azure, Firebase, Neo4j, Android Studio, Visual Studio, IntelliJ IDEA, PyCharm, Pulumi