# Rupeshsaran Govindan Balamurugan

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# **EDUCATION AND SKILLS**

- Georgia institute of Technology (2022 2023)
- GPA: 3.8/4.0
- Major: Computer Science
- Threads: Artificial Intelligence/Robotics and Media and Graphics
- Expected Graduation: May 2024
- Georgia State University and Perimeter College ((2020-2022)
- GPA: 3.9/4.0
- Major: Computer Science
- Programming: Java (Proficient), JavaScript, Python, experience in C, C++, CSS, JavaScript, HTML, React, Slack computing, cloud network, AWS, AWS cloud, AWS networking, AWS IAM.
- Personal: Calm and motivated, Determined, creative and descriptive, team worker, positive outlook, insightful and efficient.
- Clubs: Computer science club, Data science club.
- Awards: Dean's List 2021, Dean's list 2022, Honor class Awardee for academic performance, Student SI Leader computer science, International Rank 7 in International math Olympiad, National ranks in Physics and biology
- Olympiads, National rank of 50 in National biology Olympiad, Science quiz club awards and honors. Named on the Presidents list of 2021 and 2020 in perimeter college for exceptional performance in classes

# **EXPERIENCE**

## Research Full-Stack developer specializing in Java and WordPress, Researcher November 2021 - May 2022

- Head web developer for a physics Research/Blog website for Georgia state university Physics majors.
- Specialized in editing, creating and enriching the website with research material posters and research guide for future incoming students, gained experience working with research members
- Used Java and WordPress to create specific requirements enlisted for the website, significant usage of user-based interface to create thematically viewable experience for incoming website users.
- Integrated and assigned physical research (astronomy) data to the website, gained experience in data structures.

## Back-End and Data Analyst - Event Services Georgia Tech June 2023 - Present

- Data collection and acquisition: Gathering relevant data from various sources, such as databases, APIs, or external datasets, and ensuring data quality and integrity.
- Data cleaning and preprocessing: Cleaning and organizing data to remove errors, inconsistencies, or missing values. This process may involve data transformation, normalization, or imputation techniques.
- Data analysis and exploration: Conducting exploratory data analysis to uncover patterns, trends, and relationships within the data. Applying statistical analysis and data visualization techniques to effectively communicate findings.

### Robotics for All - Software Curriculum Developer/Computer Science instructor

- Developed and maintained engaging, outcome-driven curriculum for C and C++, Java, WordPress, Scratch programming courses, ensuring alignment with industry standards and learner needs.
- Successfully integrated Slack for real-time communication within educational platforms enhancing learning.

# Create-X Georgia Tech- Subleasing app Startup August 2023 - Present

- Co-founder and Lead Developer of a subleasing app startup aimed at simplifying the rental process for both tenants and landlords.
- Developed a user-friendly web and mobile platform using Java, Python, C++, React, JavaScript, CSS, and HTML to facilitate subleasing
- Conducted market research and user testing to gather valuable insights, which informed iterative product enhancements.
- Leveraged expertise in team management to foster a collaborative and innovative work culture, leading to high team morale and productivity.

### **AWS- Solutions Architect Associate- Preparation** July 2023- Present

- Invested significant time and effort in comprehensive exam preparation to achieve AWS Certified Solutions Architect - Associate
- Studied AWS architectural best practices, including designing reliable, scalable, and cost-effective solutions.
- Mastered key AWS services such as EC2, S3, VPC, RDS, and Lambda.
- Gained proficiency in designing and deploying secure, highly available applications on AWS.

#### Student Research assistant (Georgia tech) June 2022 – August 2022

- Worked as an assistant research workforce at CIESMC (Center for Center for Education Integrating Science, Mathematics, and
- Gained experience in management and database segregation of inventory items and digital data.

#### Computer Science Student SI leader/Perimeter Honors

contribute to the field's knowledge.

Helped and assisted with students struggling in the same major using programming knowledge.

# PERSONAL PROJECTS

## AI-Powered/ Machine Learning Smart Home Cooking helper

Built a Sound and AI -Powered system that optimizes Cooking in smart homes. The system can analyze Recipes and Energy Systems and give blind people and normal people assistance with cooking through making an innovative AI powered sound system using C++, Java, Python and JavaFX for the front end.

# Recovery - Mental health Website

VOLUNTEER PROJECTS

- Proficiently developed a mental health recovery website using JavaScript, HTML, and CSS.
- Designed an intuitive and responsive user interface for a seamless user experience. Curated evidence-based content and interactive features to support emotional well-being.

## Research Paper on Cognitive Thinking and Machine learning

Developed and executed research methodologies to investigate the application of cognitive models in machine learning algorithms.

Mobile Game App Development Project

making processes.

Utilized Unity3D game engine and C# programming language to create the game's core mechanics, gameplay features, and user interfaces.

Analyzed findings to discern potential enhancements for AI decision-

Authored a research paper summarizing discoveries, with the intent to

Utilized programming languages such as Java, Kotlin, or Swift, and integrated user-friendly UI/UX for intuitive navigation.

# Volunteer Screener - The American Red Cross, Georgia

# January 2021 - Present (~ 91 hours)

Interviewed and assisted with incoming volunteers, providing help with inquires and information on their desired position using red cross-based platform.