

PRANAV JANAKIRAMAN

✉ pranavjana2003@gmail.com | 📞 97550932 | 🌐 github.com/pranavjana | 🔗 linkedin.com/in/pranavjana

EDUCATION

B.Eng Computer Engineering

National University Of Singapore
CGPA: 4.5/5

Aug. 2024 – June 2028

Singapore

PROJECTS

Task Management System with Virtual Pet

Jan 2025

HacknRoll Hackathon, National University of Singapore (NUS) – Commendation Top 20 Award

- Developed responsive web app using React, Tailwind CSS, and Flask to combine task management with virtual pet gamification, boosting user engagement by 25%.
- Engineered scalable RESTful APIs with SQL to enhance task tracking efficiency by 20% while handling over 200 interactions per hour.
- Optimized state management and caching to trim load times by 40% and elevate performance.
- Implemented automated testing and CI/CD pipelines to curtail deployment errors by 30% and streamline updates.
- GitHub Repository: Task Management System with Virtual Pet.

Cloud Resume Challenge

Aug 2024 – Oct 2024

Serverless Portfolio Website

🌐 pranav-portfolio.com

- Launched a serverless personal resume website on AWS (S3, CloudFront, Route 53, Lambda) serving over 1,000 monthly visits.
- Built backend with DynamoDB and API Gateway for visitor analytics, boosting data retrieval speed by 40%.
- Automated infrastructure deployment using Terraform and implemented CI/CD pipelines via GitHub Actions to slash deployment times by 50%.
- GitHub Repository: Cloud Resume Challenge.

Amazing Race Robot System

Aug 2024 - Nov 2024

Autonomous Robot Development

- Engineered an autonomous robot to navigate obstacle courses and meet timed challenges.
- Used K-Nearest Neighbors (KNN) algorithm to boost colour sensing accuracy by 50% under varied lighting.
- Built a C-based control system with state machine logic for obstacle detection and pathfinding, curbing navigation errors by 30%.
- Conducted iterative testing and calibration to slash system failures by 25% and secure consistent performance.
- GitHub Repository: Amazing Race Robot System

CERTIFICATIONS

AWS Certified Data Engineer – Associate

Sep 2024

Data pipelines, ETL processes, and scalable data solutions.

Verify on Credly

AWS Certified Solutions Architect – Associate

May 2024

Designing secure, cost-effective, and fault-tolerant architectures.

Verify on Credly

AWS Certified Cloud Practitioner

Sep 2023

Core AWS cloud concepts, billing, security best practices.

Verify on Credly

SKILLS

- **Front-End:** React, Tailwind CSS
- **Back-End:** Flask, RESTful APIs
- **Cloud:** AWS (S3, Lambda, CloudFront, DynamoDB)
- **Database:** SQL, Relational Databases
- **Languages:** Python, C++
- **Other:** System Architecture, Agile Development