

Pranav Nutalapati

Software Engineer



pranavnutalapati@gmail.com

US Permanent Resident

EXPERIENCE //

McKinsey Digital

Senior Engineer I

Raleigh, NC

MAR 2023 – PRESENT

– Supply Chain Optimization

React, Redux, NestJS, Postgres, AWS

Creating a supply chain planning system for a large vehicle manufacturer. Optimized client-side calculation logic, creating 5x speedup. Coordinated API contract across development and data teams. Created a custom datagrid library, enabling intuitive code structure and performance by default. Built PoC for LLM-powered planning assistant.

– Distributed Automated Testing Orchestration

Python, Selenium, OpenCV, RPC, Docker

Created bespoke end-to-end test suite, synchronizing state across multiple medical device VMs. Implemented a TCP-based RPC protocol in an orchestrator/worker pattern and computer vision to validate software behavior.

– Payment Assistance Digital Journey

Angular, AWS Lambda, Sitecore

Created a centralized portal for financially challenged energy customers to find payment assistance programs. Coached client developers to cleaner code through PR reviews and problem-solving sessions. Implemented a custom SVG layout engine for a unique UI element.

– Field Service Schedule Optimization

React, Express, Postgres, Azure

Created a scheduling optimization solution for field workers at a utility company. Implemented a full-stack dashboard for planners to manually adjust schedules, with consideration for traceability and plan version control.

Brawlhalla Esports, Blue Mammoth Games

Software Developer

Atlanta, GA

OCT 2021 – FEB 2023

– Odin's Journal

React, Twitch PubSub, AWS S3, AWS Lambda

Designed and built a Twitch Extension to enhance viewership experience by overlaying interactive statistics, tournament bracket updates, and viewer votes. Delivered a concurrent live experience to 30,000 viewers.

– Website Redesign

Figma, SvelteKit, WordPress, AWS

Redesigned brawlhalla.com, migrating from a Divi-powered WordPress theme to a headless WordPress CMS with a SvelteKit front-end. Deployed site consistently crosses 25,000 pageviews per day.

– Stream Toolkit (Gjallarhorn)

React, Node.js, WebSockets, AWS EC2, GraphQL

Architected a resilient, multi-user, real-time system to ingest tournament data from several systems (start.gg, internal APIs, game spectator clients) and consolidate it for downstream CG software (CharacterWorks, Aston, vMix). An open-source version with a reduced feature set is available for community use.

PROJECTS //

– Spatial WL

C, Rust, Monado, wroots, Wayland

A work-in-progress VR desktop environment. Learning GPU programming, window managers, and systems programming.

– WebRTC Pong

JavaScript, WebRTC, NodeJS

A peer-to-peer multiplayer pong implementation, featuring rollback netcode. Built as a demo for my presentation on WebRTC at McKinsey.

– Rubik's Cube RL Agents

Python, TensorFlow, Keras, OpenAI Gym

Machine Learning (CS 4641) end-of-semester project to solve a Rubik's Cube using reinforcement learning. Explored a variety of agents, network architectures, and hyperparameters.

EDUCATION //

Georgia Institute of Technology

Bachelor of Science in Computer Science; Threads: Intelligence, Media; GPA: 3.93

Atlanta, GA

AUG 2020 – DEC 2022

CERTIFICATIONS & AWARDS //

AWS Certified Solutions Architect - Associate

APR 2024

Intl. Silver Medal in Web Technologies at WorldSkills Kazan

AUG 2019

WRITING //

The Ethics of Computer-Generated Content

DEC 2022

Term paper for my CS ethics course at Georgia Tech. Explores the implications of generative models on ownership and productivity.

Reinforcement Learning Adventures

FEB 2020

Exploration using Deep Q-Networks to play the Chrome Dinosaur Game, Connect 4, and Othello.