Aneesh Krishna Parthasarathy

Email • LinkedIn • (551) 286-0340 • GitHub • Portfolio

Education

Purdue University Honors College - Class of 2027

West Lafayette, IN

B.S. Computer Science (Focus: Machine Intelligence) + Applied Statistics

Minors: Math + Finance

- Courses: Programming in C/Java · Blockchain · DSA · OOP · Computer Architecture · Linear Algebra · Discrete Math
- Organizations: Boiler Blockchain · The Data Mine · Purdue DOSA · Cricket & Social Outreach · Tamil Sangam

Academies at Englewood (High School) - Computer Science

GPA: 4.3 (High Honor Roll), Englewood, NJ

Experience

Retail Hedging LLC, Software Engineer Intern

Mar 2025 - May 2025

- Designed and shipped a mobile-first trading UI with Auth0 integration, reducing login latency by 30% via Auth0 optimization. Built a secure Auth0–Stripe flow using custom Actions and RS256 signing.
- Developed an Express backend to implement JWT access control, reducing unauthorized feature access by 100%
- Replaced polling with efficient one-time token fetch logic using React hooks and secure JWT sync pipelines.

PlaytoonIt Inc., Full Stack Developer Intern

Jun 2025 - Aug 2025

- Built high-performance multiplayer games in Unity (C#), optimizing real-time stat syncing for 50+ concurrent players using serialization compression and delta updates, cutting bandwidth by 20% and packet size by 30%.
- Designed event-driven architecture for game logic, reducing latency spikes by 50% via object pooling.

The Data Mine - West Lafayette, IN, Undergraduate Data Science Researcher

Jan 2025 - Present

- Leveraged Python/R to analyze Indiana state datasets, uncovering key trends, anomalies, and predictive patterns
- Delivered data-driven insights to inform strategic decisions for public agencies and private-sector stakeholders

Purdue University - West Lafayette, IN, Data Science & Statistics Researcher

Mar 2025 - Present

 Analyzed 18,000+ student survey responses from Japan and the U.S. to assess evolving educational and intercultural learning values. Modeled sentiment trends pre/during/post-COVID to guide institutional research.

Projects

Portfolio - Personal Website | Product Designer & Full-Stack Developer

- Designed and developed a professional portfolio website using Next.js, JavaScript, React, and Tailwind CSS.
- Delivers a fully responsive UI to showcase projects, games, technical skills, and personal brand with impact.
- Achieved 100% SEO and 90% accessibility Lighthouse scores via semantic markup and optimized asset loading.

Local Storage Stats - Analytics Dashboard | Product Designer & Full-Stack Developer

• Engineered a high-performance analytics dashboard that transforms student data into real-time insights via dynamic charts and personalized benchmarks. Enabled performance insights, difficulty analysis, and data exports.

Freelance DAO - Ethereum Platform | Lead Developer

- Designed a fault-tolerant Ethereum freelance platform handling hourly transactions, with on-chain dispute resolution via decentralized voting, achieving 99% uptime via failover mechanisms and event-driven architecture.
- Integrated hardhat testing for contract deployment; enforced gas optimization with automated CI checks.

Vibe - Social Messaging App | Lead Developer

- Architected a low-latency chat system using Java sockets and thread pooling, supporting multiple concurrent users with quick message delivery and horizontal scaling via load-balanced worker threads.
- Integrated user authentication, media caching, and scalable session management to ensure a seamless UX.

Technical Skills

- Languages: Java (advanced) · Python (advanced) · JavaScript/TypeScript (advanced) · C/C++ (proficient) · SQL · C#
- Frameworks & Libraries: React · Next.js · Node.js · Express.js · Redux · Tailwind CSS · AngularJS · Chart.js
- Tools & Platforms: Docker · GitHub · Firebase · AWS · Azure · UNIX/Linux · Vercel · MySQL · Matplotlib
- **Skills:** Full-Stack Development · REST APIs · System Design · Scalability · Multithreading · Machine Learning · Data Analysis · CI/CD · Authentication · Algorithm Design · Shell Scripting · Agile Practices · Database Modeling
- Certifications: Endpoint Security, Ethical Hacking, Cyber-Threat Management, Network Defense (CISCO)
- Advanced Topics: Distributed Systems · Performance Optimization (profiling/caching) · ML Frameworks (PyTorch, TensorFlow) · Security (OAuth2.0) · Concurrency & Parallelism · API Rate Limiting · Asynchronous Programming