Aniket Chaudhry

EDUCATION

Northeastern University Boston, MA

Khoury College of Computer Science

September 2023 - Present

Candidate for Bachelor of Science in Computer Science, Concentration: AI

GPA: 3.9/4.0

Honors: CyberCorps Scholarship For Service, Khoury College Dean's List, Google Play Change The Game Winner **Relevant Coursework**: Distributed Systems** | Engineering LLM Integrated Systems** | Foundations of Artificial Intelligence* | Object Oriented Design | Computer Systems | Database Design | Foundations of Cybersecurity

COMPUTER KNOWLEDGE

Languages/Frameworks: Java, C/C#, Python, SQL, Go, Rust, HTML/CSS, JavaScript, React **Tools/Methods:** Git/Github, Gitlab, Jira/Confluence, Microsoft Office, AGILE/Scrum, AWS/Microsoft Azure

LEADERSHIP & WORK EXPERIENCE

Northeastern University - CS1200: First-Year Seminar Teaching Assistant

September 2025 — Present

- Mentoring 30+ first-year computer science students through weekly office hours and recitations.
- Assisting in grading assignments and guiding students on academic and co-op readiness.

General Dynamics Electric Boat, Groton, CT - Tactical Software Engineering Co-Op January 2025 — July 2025

- Created a YAML-configurable tracing service in Go, driven by gRPC protos that links 100% of OTEL-standard spans across a declared pipeline via per-hop FIFO queuing and HTTP exporting.
- Added client-side proto-based batching for the tracing service, slashing gRPC traffic by 90% while delivering complete parent-child chains in Jaeger UI for real-time latency insights.
- Implemented exhaustive test suite, achieving 100% coverage for critical Rust fault detection modules, testing all conditional paths and redundancy logic.
- Adhered to system requirements, mission design documents (MDDs), and operational protocols while working within a security-controlled environment.

Satellite Development Club, Northeastern University - Program Lead & Software Engineer August 2023 - Present

- Continuing development of project website (www.horizonsat.org) displaying the team's accomplishments and projects using Next.js, React.js, & Tailwind CSS; achieved a 40% increase in monthly visitors.
- Leading institutional collaboration with Amazon Web Services Ground Station to co-develop cloud-compatible satellite ground station software for streamlined communication with Northeastern University's planned TeraLink satellite mission.
- Delivering quarterly updates to NASA/Air Force Research Laboratory on project status for partnered satellites.
- Managing a team of 20+ students in developing 2 separate satellites to be deployed within 3 years.

Sprouts.ai, San Francisco, CA - Full-Stack Software Engineer Intern

July 2024 – September 2024

- Collaborated on developing a content management solution using Strapi and JavaScript to optimize the webpage-building process for company executives.
- Implemented a PostgreSQL schema hosted on Azure Database for PostgreSQL, scaling to handle an additional 5,000 daily queries with improved reliability.

Space Dynamics Laboratory, Albuquerque, NM - Mission Concept Intern

May 2024 – July 2024

- Assembled a comprehensive mission design document (MDD) and requirements verification matrix (RVM) to advance Northeastern University's planned sub-Terahertz satellite communication experiment.
- Operated and sent commands to AFRL's XVI satellite under a subject-matter expert (SME) to help facilitate mission objectives.

PROJECTS

Swarm Intelligence for Optimal Satellite Placement

September 2024 - December 2024

- Developed a satellite constellation placement model using swarm intelligence algorithms (Particle Swarm Optimization, Ant Colony Optimization) to optimize coverage and inter-object distance within example satellite constellations, including SpaceX Starlink's satellite network.
- Utilized publicly available Two-Line Element (TLE) data to model and distribute 60 satellites in dynamic, adversarial environments.

 ^{* =} Indicates graduate-level coursework

^{** =} Indicates coursework currently in progress