

Ahnaf Inkiad

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Available May 2025

Education:

Northeastern University, Boston, MA

Sept 2021-Present

Candidate for a Bachelor of Science in Computer Science, GPA: 3.4/4.0

Expected May 2025

Related Courses: Web Development | Object-Oriented Design | Algorithms and Data | Human Computer Interaction | Computer Systems | Foundations of Data Science | Fundamentals of Computer Science | Software Development & Innovation

Computer Knowledge:

Languages: Python (Flask, Django), JavaScript (React, Redux, NodeJS, VueJS, NextJS, Material UI), C, C++, Java, HTML, CSS, TypeScript, SQL, Dart. Familiar with: R, C#, Git, Linux, ROS2, AWS, Azure, Docker. IDEs: VS Code, IntelliJ, Eclipse.

Work Experience:

Software Engineer Co-op- Cleo Robotics

Jul 2024-Dec 2024

- Optimized TOF sensor mapping intrinsics of Dronut in C++, improving obstacle avoidance capabilities by 30%.
- Refactored MPA, MAVLink and uORB dependencies in C/C++, improving maintainability by 40%.
- Led ROS-to-ROS2 migration, enhancing system efficiency and reducing execution latency by 25%.
- Developed a thermal stress test script for VOXL in Python, enabling 99% CPU load simulation to assess stability.
- Tuned Microhard and Doodle Radio performance, increasing bandwidth utilization and reducing latency by 20%.

Software Engineer Co-op- Harvard Kennedy School

Jul 2023-Dec 2023

- Automated software installations and real-time system checks by developing ElectronJS desktop application for loaner laptops, thereby streamlining onboarding process and reducing redundancies by 75%.
- Led the development of customized HKSIT chatbot with Langchain and ChromaDB by using Python, integrating PostgreSQL database and Flask-Login for secure user management, employing Django/Jinja for robust backend and template handling, ensuring comprehensive testing through Pytest, and deploying the application on Terraform.
- Developed an automated incident management system leveraging VueJS, ServiceNow API and OAuth authentication, significantly enhancing technician workflows by 50%, enabling real-time status updates and communication.

Software Engineer- Code4Community

Jan 2024-Present

- Actively developing features for BCAN, including adding icons to indicate active/inactive grant status, implementing grant sorting, and building functionality for saving grants. Previously worked on the C4C recruitment portal, adding recruiter-controlled progression endpoints, ensuring robust error handling through comprehensive Jest testing, and enhancing the sign-up process for greater user engagement.

Software Engineer- Northeastern Mars Rover Team

Sept 2023-Dec 2023

- Implemented an Error Console for the Rover UI to display node errors and refined Turret control(-180 to 180 degrees), using ROS2(Python) and Typescript for backend and frontend integration.

Software Engineer- AerospaceNU

Sept 2023-Dec 2023

- Developed and integrated autonomous navigation capabilities for drones using Ardupilot and Pymavlink, enabling precise takeoff, navigation from point X to point Y, and landing sequences within the Webots environment.

Projects:

HuskyHorizons

Aug 2023-Jan 2024

- Designed and implemented a React.js-based cultural exchange platform for the Northeastern community, integrating Socket.IO for real-time bi-directional communication between users and Firebase Authentication for secure login.
- Deployed the platform's front end on Firebase Hosting for enhanced accessibility and the back-end on Render, with the PostgreSQL database hosted on Amazon RDS for scalable and reliable storage solutions.

InsightStock

Nov 2023-Dec 2023

- Developed a stock analysis educator mobile app using Flutter and Dart, and integrated Alpha Vantage API for real-time financial data, enabling users to analyze stock trends, performance metrics, and market insights within the app.
- Incorporated OpenAI API within the app for smart, personalized education and market analysis, boosting engagement and learning, all while hosted on Firebase, showcasing the simplification of stock analysis with AI.

CircleBreaker

May 2022-Jun 2022

- Implemented the circle breaking game using MVC architecture to improve the overall code structure of the project.
- Developed user-friendly UI elements- game menu, score display, and live animation of ball and paddle movements.