Akash Samanta

74 Whiteway Street, St. John's, NL, Canada



Skills

- Programming: Python, Java, C++, C#, Dart
- Front End: HTML, CSS, JavaScript, React, Typescript
- Back End: PHP, MySQL, PostgreSQL, Scala, Apache Spark
- MaterialUI, AJAX, jQuery, AWS (EC2, RDS, S3)
- Adobe Premiere, Photoshop, After Effects
- Flutter Android Apps

Work Experience

Datalakes Developer / 18 Hebron Way, Nasdaq Verafin

Fall 2025

• Working in the Warehouse Data Preparation Team.

UI Developer / 18 Hebron Way, Nasdaq Verafin

Spring 2024 and Winter 2025

- Worked in the Front-End Development Team in Verafin. Developed UI Components according to Figma Design and contributed to the company application. Raised and merged 25 Pull Requests to the company repository.
- Developed test for components in Jest. Worked with the QA Testing Team to target UI components by adding data test-ids.

Research and Development / Fisheries and Marine Institute

Fall 2023

- Improved eye-tracking software (Python). Added compatibility with latest TOBII Pro Glasses 3 eye-trackers using APIs.
- Redesigned User Interface and modified software to be an assessment tool for "safety-critical" industries like maritime.
- Developed and tested ability to track head orientation times, playback data with video, detect no-go zones, etc.
- Collaborated with OpenAR Project Framework for augmented reality in maritime operations. (akashcraft.ca/eyeport.php)

Research and Development / Memorial University of Newfoundland

Winter 2023

- Developed an automated desktop eye-tracking software (Python) that used TOBII Pro Glasses 2 eye-trackers.
- Tested unique areas of interest detection using matrix transformation and vector matching algorithms.
- Incorporated automatic object detection using Python ImageAI Library (TorchVision).
- Integrated support for FRAM Modelling. Coded ability to display useful eye-tracking data in graphs and tables.

Relevant Projects

2021-2023

- Full Stack Web Development. Built Personal Website (akashcraft.ca) with interactive web apps and games.
- Built Air Canada In-Flight System Replica as personal project complete with navigation, entertainment, PA system.
- Installed Windows Server at home with ADDS, DNS and RADIUS server roles which was tested on a virtual host network. Upgraded network to include Enterprise Authentication and Guest Wi-Fi with "Sign-in to Network" Login Page.
- Developed Shift Calculator, a Flutter Android app available on the Play Store, which displays work schedules on a calendar.
- Developed Python apps and games using Tkinter Library LED Strip Controller, Wordle, MySQL Banking System.
- Created informational documentaries on YouTube using Adobe Premiere and After Effects.

Education

Bachelor of Engineering / Memorial University of Newfoundland (GPA – 4.0) 2021-Present

Computer Engineering Major. Academic Term 8 (Fifth Year). Expected Graduation in 2026.

Scholarships and Awards

Faculty of Engineering and Applied Science Dean's List

International Undergraduate Academic Award

Innovasea Computer Engineering Scholarship

- International Undergraduate Academic Award
- PEGNL Connections East Work Term Award

2021-2025

Fall 2024 Winter 2024

Fall 2023

Spring 2023

Older awards omitted