Shair Yousuf Jahin

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Graduating April 2025 (4th Year), available for 4-8 month internship starting summer 2024

EDUCATION

Memorial University of Newfoundland

Bachelor of Engineering - Computer Engineering

September 2020 - April 2025

St. John's, NL, Canada

GPA: 3.96/4.0 Dean's List 2020-2023

Certification

Amazon Web Services (AWS) Certified Cloud Practitioner

January 2023 - January 2026

EXPERIENCE

National Research Council (NRC)

Software Engineering Intern

St. John's, NL, Canada May 2023 - August 2023

- Skills: Python, JavaScript, React, Docker, Linux shell, FastAPI, SQLAlchemy, XML, PostgreSQL,
 WebGL, Three.js, Pandas, Chart.js, Next.js, ChakraUI, QA testing, Gitlab
- Authored and designed backend API, database, schemas, and models (Python, FastAPI, SQLAlchemy, XML, PostgreSQL) for seamless integration with prevalent research data storage classes.
- Produced 3D ship experiment visualizer and test data viewer (WebGL, Three.js, Pandas, Chart.js) on the browser, allowing researchers to relive their experiments and efficiently analyze key events of the experiment.
- Developed a professional user interface (JavaScript, React, Next.js, ChakraUI) tailored for utilization by researchers throughout the National Research Council (NRC) across Canada.
- Composed Dockerfiles for application frontend, backend, and database server enabling microservices architecture.
- Utilised Linux shell commands to configure local office database server and perform QA testing of the application.

Nasdaq — Verafin Inc.

St. John's, NL, Canada

Full-Stack Developer Intern

 $September\ 2022\ -\ December\ 2022$

- Skills: Java, JavaScript, PostgreSQL, Automated testing, Selenium, Karma, SQL, QA testing, Salesforce, Github, Confluence
- $\circ \ \ Optimized \ cost-tracking \ processes \ \textbf{(Java, Javascript, PostgreSQL)} \ saving \ clients \ 10h \ of \ work \ and \ \$100{,}000 \ in \ costs.$
- o Automated testing for back-end server database (Java, Selenium) and front-end (Javascript, Karma).
- Solved 13+ customer cases and bugs (JavaScript, Java, SQL, PostgreSQL). Coordinated with customers and contributed to increased customer satisfaction and team success.
- Performed **QA testing** on new software features.
- Used Salesforce, GitHub, and Confluence to coordinate with team. Used Linux and MacOS dev environments.

Avalon Holographics

St. John's, NL, Canada

January 2022 - April 2022

- Software Developer Intern
 - Skills: C++, Unreal Engine, OpenGL, HLSL Shaders, linear Algebra, hologram, Graphics pipeline, Agile, Bitbucket, Jira, Confluence
 - Developed runtime segmentation functionality (C++, Unreal Engine, OpenGL, HLSL Shaders) for CT scans. Allows radiologists to easily analyze tumors, cancers, abscesses, etc.
 - Implemented new UI/UX features (C++, Unreal Engine, custom hologram API). Transformed holographic application from keyboard-based to mouse-based controls for drastically improved user experience.
 - Used linear algebra techniques to transform 2D mouse position into 3D space to manipulate holographic models.
 - End of work term report on **graphics pipeline** and techniques used to render **holographic** visuals.
 - Used BitBucket, Jira, and Confluence for agile software development.

Canadian Federation of Engineering Students (CFES)

Ottawa, ON, Canada

Corporate Relations Commissioner (CRC)

September 2021 - Present

- \circ Acquired additional \$15,000 in yearly funding through numerous partnership contract negotiations.
- o Interviewed and evaluated corporate partners for Lean 6 Sigma National Conference.
- o Consulted and mentored sponsorship teams of 4 National Conferences.
- Managed the cooperative relationships with existing corporate partners (Engineering Canada, Association of Consulting Engineering Companies, Ontario Society of Professional Engineers).
- o Obtained \$50,000 in 4 months as VP sponsorship for Canadian Engineering Leadership Conference (CELC) 2022.

PROJECTS

• Food Identifier

- Developed a machine learning TinyVGG Convolutional Neural Network (CNN) (Python, PyTorch, Matplotlib, PyPlot, Pandas, NumPy) for multiclass identification of different types of food.
- Trained and evaluated the model, achieving accurate classification results and gaining expertise in CNN architectures, data preprocessing, and model evaluation.

• Port Ferry Booking app

- o Authored ferry booking app (React, Next.js, FastAPI, SQLAlchemy, SQLite database) for provincial ports.
- Features to search, select ports and travel time, automated reservation email, booking check-up, and cancellation system.