ZIAD ELRAGGAL

COMPUTER ENGINEERING STUDENT

CONTACT

- (709)-529-0994
- zmaaelraggal@mun.ca
- Explore My Portfolio and Projects
- 40 livyer's Loop, St.john's, A1B 3P7

EDUCATION

Memorial University of Newfoundland and Labrador

Faculty of Engineering and Applied Science Co-op Program
Enrolled in Academic Term 5
GPA 3.50/4.00
2022-2027

SKILLS

- Full-Stack
- Git, Github & GitFlow
- Data Visualization
- Cloud & DevOps
- Database Managment
- Machine-Learning

AWARDS AND CERTIFICATIONS

Academic Excellence Scholarship
Valued at 4000$ by Memorial University

British Checkpoint Ranking
Awarded first position within the country for English Writing Skills

Mental Health First Aid Training
issued by Memorial University Residence Life

LANGUAGES

- English
- Arabic
- German

ABOUT ME

Third-year Computer Engineering Student at Memorial University of Newfoundland and Labrador | Demonstrated proficiency in research, organization, and time management; skilled at diagnosing problems and devising innovative, tailored solutions

WORK EXPERIENCE

Software Engineering Student

Angler Solutions Inc., St.John's, Canada

September 2024 -December 2024

- Led full-stack development of renewable energy simulation software using Nuxt.js, FastAPI, Docker, and PostgreSQL. Streamlined AWS deployment and GitHub workflows to ensure seamless integration and system reliability.
- Engineered a scalable wind speed database, reducing simulation runtimes by 70% and enabling future API commercialization.
- Developed dynamic charting tools with Seaborn and Matplotlib, delivering 70+ customizable visualizations to enhance user analysis.
- Implemented a machine learning model to predict missing real-time wind speed data with sub-second accuracy, boosting system efficiency and reliability.

Software Developer Student - R&D

Marine Institute, St.John's, Canada

Jan 2024 -Apr 2024

- Engineered MATLAB script into user-friendly app for Keithley data logging, integrating Test Script Builder and Lua scripting for comprehensive functionality and testing.
- Created detailed user manuals for operational procedures and troubleshooting for Keithley data loggers and developed script.
- Developed precise experiment protocols and equipment lists for smooth execution across diverse scenarios.
- Integrated coding solutions to automate processes, reducing onsite monitoring needs by 23.8%, while supervising long-term experiments to maintain optimized efficiency and code integrity.

PROJECTS

Project HEART: Health Enablement and Risk Tracking

Oct 2024 -Current

- Engineered an elder care system integrating AI fall detection with Google's MediaPipe to ensure rapid emergency response and health monitoring.
- Created a full-stack React Native app featuring secure authentication and live status tracking, integrated with Dockerized FastAPI-PostgreSQL, and showcased via a Nuxt.js website.

Project Web: An Online Portfolio

Jan 2024 -May 2024

- Built an interactive portfolio with JavaScript, HTML, CSS, React.js, and Three.js. Rebuilt with NuxtJS and Tailwind CSS to enhance performance and responsiveness.
- Acquired UI/UX skills emphasizing captivating visuals, effective communication, and 3D integration.

VOLUNTEER EXPERIENCE

Barnes House President

Sep 2023 -Apr 2024

- · Collaborated with residence leaders to organize large-scale community events, managing logistics and enhancing participation.
- · Supported house-specific initiatives as an executive council member, connecting students to resources and fostering teamwork in resolving challenges