

EDWARD RYAN

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SUMMARY

As a skilled programmer, I have expertise in creating visually appealing and user-friendly websites using HTML, CSS, and JavaScript, as well as back-end programming languages such as Python, C++, C, PHP, and Java. Additionally, I possess knowledge in database management using SQL, MatLab, LabVIEW, R, and Excel. My proficiency in various programming languages has enabled me to collaborate effectively with clients to develop customized solutions that meet their specific requirements, resulting in increased exposure and higher engagement for their businesses.

EXPERIENCE

Freelance Front-End Developer

Lev Oisin

Dec 2022 - Present

Ardsley, NY

- Developed responsive and accessible static websites using HTML, CSS, and JavaScript, resulting in improved user experience, user interface and increased traffic.
- Collaborated with clients to identify requirements, using Agile methodologies, to deliver a customized solution that met their needs, ensuring client satisfaction.
- Designed and developed visually engaging static website using CSS frameworks and JavaScript libraries, resulting in increased visibility and exposure for clients businesses.
- Conducted cross-browser testing through a version control system Git/GitHub while testing and debugging functions utilizing Visual Studios.

Teaching Assistant

SUNY Brockport

Oct 2018 - May 2021

Brockport, NY

- Assisted in teaching undergraduate physics courses by conducting laboratory sections.

SOFTWARE DEVELOPMENT IN EDUCATION RESEARCH

Astrophysical Research using Imaging, Spectroscopy and General Relativity

University of Surrey

Oct 2021 - May 2022

Guildford, UK

- Optimized Python code for performance by implementing multi-threading, multiprocessing, and distributed computing techniques.
- Conducted extensive testing of Python code and implemented unit tests to ensure the accuracy and validity of research findings.
- Programmed Python algorithms to process and analyze dark and flat field images using libraries such as AstroPy, NumPy, SciPy, and Matplotlib.
- Employed Python and DS9 algorithms to extract data from astronomical images and investigate properties and characteristics of solar systems.

Arduino Mars Rover

SUNY Brockport

Jan 2020 - May 2020

Brockport, NY

- Designed and developed a robust C/C++ application to facilitate precise navigation of a robotic car using line tracking, sunlight, and ethanol detection.
- Implemented C++ algorithms to optimize the performance of the robotic car and ensure accurate and reliable detection of environmental conditions.
- Integrated C/C++ code with various hardware components of the robotic car such as sensors, motors, and controllers, ensuring smooth communication and seamless operation.
- Implemented multi-threading and multiprocessing techniques in C++ to improve application performance and reduce response time.

SCIENTIFIC RESEARCH PROJECTS

Dissertation: *Simulation Analysis of a Periodically Structured Dielectric Material*

- Utilized Lumerical to create a 3D rendering of the dielectric material.
- Conducted data analysis using MatLab.

Research Project: *Magneto-Optic Kerr Effect*

- Utilized Autodesk Fusion 360 to design 3D MOKE schematics.
- Conducted data analysis using Microsoft Excel.

LEADERSHIP EXPERIENCE

Head Coach / Manager

Sep 2021 - Nov 2022

University of Surrey Baseball & Softball Society

Guildford, UK

- Utilized strong leadership skills to manage a team of athletes, motivating and inspiring them to reach their full potential, resulting in a winning season and making it to the national tournament.
- Employed effective communication skills to clearly convey game strategies and provide constructive feedback to team members, resulting in improved individual and team performance.

Treasurer

Jun 2019 - Sep 2020

Brockport Student Government

Brockport, NY

- Implemented software conversions during staff training to improve organizational efficiency, showcasing proficiency in technological solutions and the ability to train others.
- Managed budgets and ensured adherence to policies and regulations for 132 clubs, demonstrating strong organizational and analytical skills.

EDUCATION

MSc Physics, University of Surrey — Graduated with Merit

2022

BS Physics, SUNY Brockport

2021

- Minors in Computer Science and Mathematics

CERTIFICATES

Google Data Analytics Certificate — Google

2022

KEY SKILLS

Front-End Languages

HTML, CSS, JavaScript, JSON, Bootstrap, React, SasS

Back-End Languages

Python, C++, C/C#, PHP, Java, Django/Flask

Database Management

SQL, MySQL, PostgreSQL, MatLab, LabVIEW, R, Excel/Sheets

Operating Systems

Windows, Linux, macOS, chromeOS

Miscellaneous

Shell, LaTeX, Tableau, Git/GitHub, MIPS

Soft Skills

Problem-solving, Proactive, Team-Oriented, Analytical, Motivated, Adaptable, Creative, Attention to Detail, Time Management, Collaboration, Hardworking