Feras Aljoudi

Virtual Resumes: Version 1 | Version 2
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Experience

COOP-Bioinformatic Programmer SEP 2022 - APR 2023
Agriculture&Agri Food Canada *Remote*

- Comprehensive documentation of software tools and workflows.
- Generating dot plots using Gnuplot software and Mummer software in Linux.
- Genetic variant identification using C++, Java, and Python languages.
- Advanced Data Analysis through Sequence Comparison.
- Impact on public health through Bioinformatics.

COOP-Electrical Engineering Intern JAN 2022 - Aug 2022
SaskPower *Regina, SK*

- Preparing contract's documents between SaskPower and the contractors.
- Contacting various vendors and purchasing the required equipment through emails.
- Preparing Excel sheets and PowerPoint presentations in Microsoft 365.
- Identifying the scope of work with the contractor while visiting the field.
- Uninstalling relays and switches and salvaging them in the proper containers.

Store Manager NOV 2018 - DEC 2022
YM Inc Urban Planet *Regina, SK*

- Managing schedules and making sure the store needs are covered.
- Making monthly sales targets.
- Analyzing the business based on the top sellers in the store and the company.
- Assisting customers and making sure they were satisfied before they left the store.
- Managing the wage cost for the store and performing partnership with other banners.

Project Coordinator JAN 2018 - MAY 2018
ZGEMI *Regina, SK*

- Supervising the laborers and making sure the tasks were getting completed.
- Measuring the area of the rooms and walls.
- Completing the final report for each room and reporting any uncompleted work.
- Recording and adding the employees hours and wage through the Microsoft Office – Excel.

Skills

Languages:

→ C++, C, C#, Python, Java, PHP, HTML, CSS, VHDL
→ JavaScript, TypeScript, ShellScript, ARM, MIPS

Web Development:

→ Vue, Vite, NPM, React, Bootstrap, Chakra UI, Git
→ Spring Boot, Express.js, Nood.js, jQuery, WordPress, Figma

Machine Learning:

→ TensorFlow, Keras, NumPy, Pandas, Matplotlib, PyTorch

Cloud and Databases:

→ Firebase, MongoDB, GitHub Pages, AWS, SQL, MySQL

Tools and Platforms:

→ VS Code, Docker, Casa OS, Anaconda, Code::Blocks, QtSpim, Postman

→ Eclipse IDE, Ubuntu, Keil uVision, Vivado, Solid Edge, Notion

Hardware Development:

→ STM32, Basys3, Raspberry Pi

Management Skills: Leveraging expertise in interpersonal communication, team leadership, and strategic business analysis.

Projects

Machine Learning and Image Processing — APR. 2024

ENSE412 class

- Developed a Driver Drowsiness Detection model using Python and TensorFlow, implementing a Convolutional Neural Network (CNN) with a pre-trained VGG16 model.
- Explored various machine learning algorithms and integrated the CNN model into a Flask-based web application for real-time image analysis.
- Achieved high prediction accuracy, documenting the project development process and model performance analysis in a detailed Jupyter notebook.
- To view full details: DriverDrowsinessDetection

STM32-Based Smart Parking Management System — MAR. 2024

ENEL351 class

- Engineered a smart parking solution using STM32 microcontroller, featuring real-time parking availability display, automated gate operation, and fire alarm.
- Integrated various sensors including pressure, infrared, and gas sensors to manage parking operations efficiently.
- Programmed the entire system in embedded C with a modular design approach for easy maintenance and scalability.
- To view full details: AljoudiParkingSystem

Web Development for SK. Career Development Association — JUL. 2023

SKCDA

- Collaborated with a team to design and launch a WordPress-based website aimed at supporting Career Development Practitioners across Saskatchewan.
- Engaged in the full project lifecycle from conceptualization to deployment.
- Integrated features for member engagement, leveraging WordPress's versatile platform.
- To view full details: SKCDA Project

Embedded Systems and Interactive Game Design — NOV. 2023

ENSE352 class

- Engineered a Simon Game using C with an STM32 Nucleo Board for hardware interfacing, featuring 10 levels of increasing difficulty, input handling, and visual feedback.
- Utilized classic "Cylon Eye Scanner" start sequence and level progress/failure indicators.
- Applied time constraints to user inputs for enhanced gameplay challenge and utilized an isolated resistor for LED current regulation.
- To view full details: SimonGame

FPGA-Based Digital Scheduling and Display System — NOV. 2023

ENEL384 class

- Developed a class scheduling digital circuit on a BASYS-3 FPGA board using VHDL in Vivado, featuring multiplexed display logic for rapid switching.
- Integrated LED indicators for class selection and weekly schedule display to enhance user experience.
- Demonstrated proficiency in digital system design and FPGA programming, showcasing practical application of hardware description languages.
- To view full details: ClassesSchedule

Education

University of Regina — Regina, SK

Bachelor of Applied Science in Software Systems Engineering — *PRESENT*