Ali El Achkar

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EXPERIENCE

Intermediate Software Developer
Nov 2021– Apr 2023

University of Ottawa, Department of Family Medicine

- Developed the whole stack of the Innovation Portal, a centralized platform hosting a diverse range of learning projects within the Department of Family Medicine.
- Led the development of 6 web applications that provided learning modules.
- Managed the development of 3 VR applications for the department, delivering immersive training experience for residents.
- Utilized Docker to create optimized images for application deployment, ensuring efficient packaging and deployment of the applications.
- Provisioned virtual servers to run the applications with AWS EC2, while leveraging IAM for secure access management.
- Implemented CloudWatch for monitoring and managing the applications' performance, ensuring optimal operation and timely detection of any issues.
- Introduced and implemented agile processes to bring structure to the development of the Innovation Portal.
- Provided feedback and guidance on the design of all the applications, ensuring optimal experiences.
- Developed and maintained a CRUD API that seamlessly communicates with the SQL Server database, ensuring efficient data management and retrieval.
- Mentored and oversaw a team of 15-20 interns, ensuring effective coordination and successful project execution.

Tools used: AWS, Azure, Docker, Node.js, Express, Cypress, SQL Server 2019, Auth0, GitLab, Github, Confluence, Jira, React, Nextjs, .NET Core 2.1, .NET 6.0, Firebase, Meta Quest 2.

Product Development, Front-end Developer
May 2021 – Aug 2021

Mitel Networks

- Collaborated with development teams, working with both Angular and React apps to create new components and optimize development servers.
- Successfully migrated the testing framework from Protractor to Cypress testing efficiency and reliability.
- Designed and implemented end-to-end (E2E) and unit tests for Angular components, ensuring code integrity and preventing regressions.
- Utilized JavaScript, TypeScript, HTML, and SCSS to develop high-quality front-end solutions that met project requirements and industry best practices.
- Actively participated in code reviews, providing feedback and suggestions to ensure code quality and maintain best coding practices.

Tools used: JavaScript, TypeScript, HTML, SCSS, StencilJS, Storybook, React, Angular, Cypress, GitHub.

Communication Projects Assistant, IT and Webmaster
May 2019 – Nov 2021

University of Ottawa, Faculty of Law, Common Law section

- Managed and facilitated the update and maintenance of the faculty's IT system, ensuring smooth operation.
- Provided comprehensive IT support to faculty personnel and professors, troubleshooting hardware and software issues, and resolving technical problems promptly.
- Employed tools listed below to enhance the functionality and design of the faculty website.

Tools used: Drupal, SQL, Kace, HTML, CSS, Javascript, Campaigner, Adobe Lightroom, Sony Vegas Pro, Office 365.

Software Tester
Sep 2020 – Dec 2020

BlackBerry

- Actively participated in all aspects of the software testing process, collaborating with testers, developers, management, and project stakeholders.
- Designed and implemented manual test cases for BlackBerry Security Applications, ensuring comprehensive coverage and adherence to project specifications.
- Responsible for performing hands-on testing of new features and functions to ensure product functionality is working according to specifications.
- Analyzed and reproduced complex problems within test environments based on test results and customer-reported inquiries.
- Utilized tools such as IIS (Internet Information Services) and Windows Server 2012 to create and manage testing dashboards, facilitating efficient testing processes.

Tools used: IIS, Windows Server 2012, Jira, Confluence, TestRail.

Localization QA Specialist
Jan 2020 – Apr 2020

OpenText

- Conducted Quality Assurance (QA) activities, including testing and verification of localized products to ensure accuracy and adherence to localization standards.
- Maintained documentation and generated reports for various aspects of project.
- Worked on scripting and parsing using Regex and Java, automating processes, and facilitating data manipulation.
- Utilized programming languages such as Java and Python to develop software solutions to improve productivity and enhance project outcomes.
- Leveraged tools listed below for localization and QA activities, facilitating efficient localization workflows.

Tools used: Java, Python, Secure Shell, Ruby, SDL Passolo

PROJECTS

CyberGlove

- Developed a glove using Raspberry Pi 4, Arduino Nano, and MPU 6050 to translate hand movements into American Sign Language (ASL).
  Tools: Arduino, Raspberry Pi, MPU 6050, MQTT, Python, PCB Wiring, GitHub.

ServiceProvo

- Designed and developed an Android app with Java that connects clients with services providers (e.g., plumbers, cooks, gardeners).
  Tools: Android Studio, Java, XML, Firebase, SQL, GitHub

MeFIT Leaderboard
- Created an app that dynamically manages leaderboards for athletes in various competitions, with customizable ranking methods
  Tools: PostgreSQL, Javascript, XML, HTML, CSS, GitHub

Real-time systems project
- Developed a subsystem to monitor and control energy levels from solar panels using an Arduino terminal.
  Tools: C, Arduino, AM335x, CodeComposer, Doxygen, BitBucket

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EDUCATION

University of Ottawa   Sep 2017 – Dec 2021
Ottawa, School of Electrical Engineering and Computer Science
- Bachelor of Applied Science in Computer Engineering, Cum Laude