KHUSHAL KUMAR SINGH

Ottawa, ON | @: 613-702-2215

SUMMARY

- Professional full-stack Developer with strong analytical & problem-solving skills with over 3
 years of experience in all phases of software development life Cycle and technical expertise
 in OOD and TDD.
- Skilled in NextJS, NodeJS, C#, Python, and JavaScript programming, with a proven ability to build, integrate APIs and open-source projects.
- Demonstrated proficiency in optimizing testing pipelines with white-source scans, streamlining data extraction and verification from databases.
- Exceptional attention to detail and a collaborative problem-solving approach.
- A creative thinker, proficient in software development and working with various data structures and algorithms.

WORK EXPERIENCE

Motorola Solutions Canada – Software Engineer

May 2022 – Jan 2023

- Worked on MDS configurator for VESTA 911 Emergency Call Handling Software to develop an algorithm that reduced data validation time from 50 minutes to 6 minutes (83% enhancement).
- Efficiently inserted, extracted, and modified data from a PostgreSQL database using Python.
- Developed test cases using C# and XML to validate the system before version upgrade deployments.

Motorola Solutions Canada – Software Engineer (Internship)

Jan 2021 – Apr 2022

- Resolved 25+ security vulnerabilities during infrastructure health checks on different labs
- Used Angular.ts and Material library to transform MDS user interface, reducing load time by 80% and improving user-friendliness.
- Implemented automated white-source scans within testing pipelines across 10+ projects on TeamCity platform to ensure compliance of software dependencies with US Federal laws.
- Took charge of scrum meetings in the Scrum master's abscense, ensuring seamless communication and progress towards sprint goals.

Ford Motor Company of Canada – Software Developer (Internship) Sept 2020–Dec 2020

- Collaborated with ECG team consisting of 26 developers to update user profiles on BlackBerry's QNX infotainment software within ford vehicles.
- Created strategic unit test (UUT) cases for software functionality using C++, leveraging Google Test and Google Mock frameworks to achieve 100% code coverage.
- Documented designs, validated efficacy, and utilized Jenkins to address bugs in 10+ generated software builds.

Carleton University – Web Developer (Internship)

June 2020 - Aug 2020

- Built a <u>Self-Assessment portal</u> (CRUD app) using ReactJS and Bootstrap where 4th-year engineering uploaded and received feedback on their capstone projects.
- Launched a PyMongo-Flask application, using React.js for frontend and Python for backend, with MongoDB as the database; managed the exchange of data between frontend and backend using Axios API.
- Worked on the <u>sWall project</u> a large interactive wall of screens showcasing history, present activities, and success stories of the SCE Department to 4000 students.
- Wireframed the system through <u>Balsamiq sketches</u> and developed it using Vue.js and CSS Bootstrap.
- Deployed Web-CAT, an automated assignment grading tool, within Docker by integrating Apache Tomcat Server with Java Version 8 and a MySQL database.
- Published <u>textual</u> and <u>video</u> documentation showing the process.

HOBBIES

Playing football, exploring new travel destinations for hiking, and indulging in leisurely drives

EDUCATION

Carleton University

Graduated: May. 2022

B.S. Computer Science Honours

Concentration: Computer and

Internet Security

GPA: 9.81/12

Minor in Mathematics

GPA: 11.75/12

Dean's List Award 2022

S/W METHODOLOGIES

- Agile
- Scrum

LANGUAGES

- JavaScript
- Python
- C++
- C#
- SQL
- Java

FRAMEWORKS/TOOLS

- Node.js
- ReactJS | NextJS
- REST APIs
- JSON
- JIRA
- Jenkins
- Team-city
- Perforce
- Postman
- Docker

EXTRA-CURRICULAR ACTIVITIES

- Executive Co-ordinator of Student Association (CASI)|
 Carleton University
- Leader of Python Study
 Group | Carleton University