GUNIN KHANNA

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SKILLS

Languages: C, C++, Java, Python, JavaScript, HTML, HTL, CSS, Sass, Groovy, MATLAB, VHDL

Frameworks & Libraries: Node.js, Vue.js, Express, MongoDB, Angular, Bootstrap, Jquery, MySQL, CouchDB, PouchDB, Ionic

UI/UX: Zeplin, Sketch, Adobe Photoshop, Adobe Experience Manager(AEM), Invision. ON1

Others: Git, Docker, Solr, JSON, JIRA, Agile Methodologies, Webpack, Junit, SOAP, RESTful

AWARDS

University of Waterloo • Engineering International Student Scholarship

 Extraordinary overall performance, awarded to 20 international students

University of Waterloo • President's Scholarship of Distinction

• Obtaining an overall incoming average above 95%

UXP Systems • Certified Scrum Team Member

EDUCATION

University of Waterloo Computer Engineering, Honours, Cooperative Program 2020

Relevant Courses

• Operating Systems • Embedded Microprocessor Systems • Data Structures and Algorithms • Project Management • Compilers • Digital Systems Engineering

ACTIVITIES

Hackster's Club

 Assisted in a drone implementation, including hardware design to make it cost effective

Mathematics blog

guninkhannamathematics

EXPERIENCE

DST Systems · Toronto, ON

Software Developer · April 18 to Current

- Worked on a team to implement a **Hyperledger Composer** to transfer work objects amongst themselves securely while maintaining an audit trail.
- Independently developed and designed a *cross-platform* **lonic** application to replace the manual process of dispatching and registering the incoming post
- Redesigned the existing CouchDB to reduce the number of web-sockets from 6 to 2
- Secured the application by a JWT-auth server and through Nginx reverse proxy

Great-West Life · Toronto, ON

Software Developer · Sept. 17 to Dec. 17

- Developed multiple *data visualization* components using **Vue**, **Docker**, and **Solr** to display complexly structured data.
- Engineered an application to track user sign-in/sign-out for the distribution center using the **MEAN** stack.
- Designed and developed multiple components on AEM to be used across all web platforms using Java, HTML, CSS, JavaScript, XML, and SQL

UXP Systems · Toronto, ON

Automation Developer · Jan. 17 to May 17

- Worked on an Agile project with Vodafone, **3.2 million** users, to implement **SAML** login, registration and authentication
- Developed Groovy scripts to retrieve Captcha, session-id, cookies and managed customer data using SQL
- Increased the automotive test coverage from 65% to 95% for CWC Flow, video streaming service, using Java, TestNG and Selenium
- Integrated RESTful API testing using SoapUI, CURL, JavaScript, JSON in a UNIX box

PROJECTS

Spore | Java, Node is and MongoDB

- Organizational tool for students, developed an algorithm to convert PDFs to text
- Implemented a parser to intelligently read critical dates from the course outline and export it to local/third party calendar i.e shareable with friends

Detect-It | VHDL, FPGAs

- Implemented **Kirsch edge detector** algorithm in **VHDL** to detect edges by identifying an abrupt change in the brightness for each pixel.
- Optimized the algorithm by using overlapping pipelining for the Dataflow analyses

IMDB Sentiment Analysis

- Implemented Naive Bayes Classifier to determine IMDB movie reviews as +ive or -ive using **NLP** in **Python**
- Cleaned the data by implementing Bag of Words and Word2Vec technique using nltk,
 re, and scikit-learn
- Created a **heat-map** of the confusion matrix to provide graphical representation of accuracy, precision, and recall

WebServer | C++

- · Simulated the working of a web-server using linked lists and priority queues
- Accessed client requests from a text file to determine the transmission delay for requests and other web statistics