GUNIN KHANNA

✉ g3khanna@edu.uwaterloo.ca ● http://guninkhanna.xyz in guninkhanna ○ guninkhanna

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, Co-operative 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* **Ionic** 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.js 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