Kate Kim

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Projects

Cloud Management System   May 2018 – Present

- ✓ Creating a management system for cloud storages for easier access, handle, and search in one application.
- ✓ Exposed in Java UI frameworks (swings and AWT) and open source APIs of Dropbox, Google Drive, and One Drive.
- ✓ Enhanced leadership and project management skills as directing the project.

Connect-4 Online   June 2018 – Present

- ✓ Developing the web version of a board game, Connect-4, in a group of 2.
- ✓ Experiencing the whole project workflow from start to the end, including server-side and UI-side.
- ✓ Improving high-level designing, estimating, and planning skills.

Digital Image Processing   Jan 2018 – Apr 2018

- ✓ Implemented Kirsch edge detector algorithm in VHDL, which detects edges of an image by brightness of nearby pixels of each pixel.
- ✓ Calculated the direction of edges using convolution table and derivative functions.
- ✓ Improved collaboration and time management skills with tight deadlines.

WebGL website   Jan 2018 – Mar 2018

- ✓ Created scenes and 3D rendering characters and animals using Three.js.
- ✓ Learned React and Redux for faster render and better state management.

Experiences

Web & Cloud Application Developer   Apr 2018 – Aug 2018

Autodesk Inc.   Montreal, Canada

- ✓ Deeper understanding of React.js, its state and lifecycle, and MobX.
- ✓ Creating responsive and interactive web components, unit-testing using mocha, chai, enzyme, and sinon.
- ✓ Using Autodesk infrastructure software to manage data faster and in a structural way.
- ✓ Became better on handling challenges and not being afraid of asking around.

Software Engineer   Sep 2017 – Dec 2017

Ford Motor Company   Kanata, Canada

- ✓ Designed and implemented location-based services for next generation of Ford navigation system.
- ✓ Excellent serial programming experience with GPS to calculate precise location of a vehicle.
- ✓ Developed prototype driver for I2C bus to obtain gyroscope and accelerometer data in C++.
- ✓ Created unit-tests with Google test and Google mocks and experienced in test driven development.
- ✓ Obtained better teamwork and communication skills in an agile environment.

QA Automation Developer
IBM Canada

Jan 2017 – Apr 2017
Toronto, Canada

- ✓ Became familiar to Jenkins, its plug-ins, and Groovy script for orienting Jenkins jobs.
- ✓ Created a 'Dashboard' which uses Jenkins API to get test results' information in JSON format and parses and inserts into the corresponding database using RESTful APIs in Python.
- ✓ Improved attention-to-detail skill to assure quality of the product and automation.

Software Engineer
Minds Lab

May 2016 – Sep 2016
Seoul, Korea & New Jersey, USA

- ✓ Handled Big Data for supervised deep learning programs; Speech-to-text and Text-analysis.
- ✓ Created an interactive web application for the company conference using Bootstrap.

Education

University of Waterloo
Candidate for Bachelor of Applied Science, Comp. Eng.

Sep 2015 – Present
Waterloo, ON

- ✓ Concurrent and Parallel Programming: studied deeper level of multi-threading, synchronization, and memory management.
- ✓ Compilers: gained knowledge of programming paradigms, compilation, and interpretation.
- ✓ Algorithms and Data Structures: learned about many kinds data structures, basic algorithms, and optimization and program efficiency.
- ✓ Digital Hardware Systems: worked on dataflow diagrams, timing and power analysis, and performance optimization in hardware description language, VHDL.
- ✓ Probability Theory and Statistics: explored many probability and statistics theories and functions.
- ✓ Discrete Mathematics: learned probability algorithms, public-key cryptography, RSA, and graph theory