

JOONSOO KIM

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EDUCATION

2016 – 2021 **Bachelor of Applied Science**, Computer Engineering with PEY, Queen's University, Kingston, ON

EXPERIENCE

Oct 2020 - Full Stack Developer, Checkmate, Toronto, ON, <https://bluechip-checkmate.netlify.app/>

- Apr 2021**
- Architected and designed the backend and frontend of the stock exchange information service application using ReactJS, GraphQL, Prisma, Apollo, React Native, and Heroku.
 - Published a live testing website within a 1-month period as a scrum master overseeing a team of 5.
 - Integrated web service into iOS and Android using Expo and React Native to expand commercial.

May 2019 Computers and Control Design Engineer (PEY), Ontario Power Generation, Pickering, ON

- May 2020**
- Investigated and analyzed critical errors on the Shut Down System by programming C++ and Shell scripts to replicate errors that occurred at the nuclear plant site. Reduced 6 months investigation period to 2 weeks by use of scripts.
 - Worked as a Project lead with a team of 8 senior engineers to investigate a Display/Test Computer Video drop-out issue. Solved the issue utilizing divide and conquer methods.
 - Integrated the UI and drivers of a software application that replicates the field data using LabView, C#, and .NET. Reduced the overall processing time to run all the test cases to 50%.

June – Frontend Developer, Diversability Development Organization, Brampton, ON

- Aug 2018**
- Designed a website using software programs such as HTML, CSS, JavaScript, WordPress, PHP, and Python to ensure website compliance with AODA accessibility standards.
 - Optimized the server traffic, eCommerce, image sizes, and email transfer to make the overall loading time 10% faster.

PROJECTS

2020 - Remote Surgical Robotic Arm, Queen's University, Kingston, ON

- 2021**
- Developed a wireless communication to control the surgical robotic arm by creating an online web server to send serial data to the Arduino robotic arm. Reduced the communication latency to 20ms which is 10 times faster than the industry standards for remote surgeries.
 - Utilized Unreal Engine 4 and Oculus Rift VR headsets to create VR/AR environment to control the robotic arm and live stream the actions from anywhere in the world.

2019 Heartbeat Sensor VR Game, Queen's University, Kingston, ON

- Developed an exercise game in Unity for the Google Daydream VR headset utilizing a heart rate monitor and an Arduino Uno.
- Implemented a serial port library into Unity such that pulse sensor readings can be read.

TECHNICAL SKILLS

Languages: Java, Python, C#, .NET, PT Pascal

Backend: PostgreSQL, MySQL, Node, GraphQL, Prisma, PHP, SQLite, Flask-SQLAlchemy, Selenium

Frontend: React, Apollo, Redux, Android, UE4, Expo, Unity, HTML, CSS, JavaScript

DevOps: Git, Heroku, Docker, Digital Ocean, Netlify