

Natalie Smith | Engineer

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Key Competencies

- Thorough Angular 2+ and Javascript knowledge.
- Full-stack development using Node.js.
- Builder of intuitive and reactive user interfaces.
- Ability to work effectively within a team setting while also being a motivated, proactive and self-starting independent worker.
- Possess willingness and work ethic to learn new technologies and skills.
- Extensive experience with customer service and practical problem-solving as well as exceptional written and verbal communication skills.

Technical Skills

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|--------------|-----------------------|
| ○ HTML5/CSS3 | ○ Javascript/ES2017 |
| ○ Angular 2 | ○ Node.js |
| ○ Sass | ○ Responsive Design |
| ○ Gulp | ○ SQL/MongoDB |
| ○ C | ○ Version Control/Git |

Education

University of Victoria
B.Eng, Biomedical Engineering
Specialization in Mechatronics

Victoria BC
2011–2016

Experience

QuikStor Software and Security
Front End Engineer

Van Nuys, CA
May 2017–Present

Responsible for front-end development of a large-scale business management web application.

- Design, develop and implement intuitive user interfaces using Angular 2 and Typescript.
- Extensive use of functional reactive programming using RxJS.
- Implement data manipulation by communicating with a RESTful API.
- Collaborate in a team environment and communicate with technical and non-technical members of the team to implement features.
- Train new team members and review code contributions.

University of Victoria
Undergraduate Researcher

Victoria BC
May–Aug 2015

Worked in the Crystal Growth Laboratory designing a new PID control system for a 30 zone crystal growth furnace.

University of Victoria
Undergraduate Researcher

Victoria BC
Sept–Dec 2013

Worked in the Biomedical Design and Systems Laboratory developing a medical phantom for use in testing and calibrating an ultrasound-controlled hand prosthesis.

Island Health

Victoria BC

Clinical Engineering Co-op

Jan–Apr 2013

Worked in the Biomedical Engineering department of Island Health to assist in tasks such as device procurement and installation, cost analysis, preventative maintenance, and consulting with medical professionals.

Saanich Commonwealth Place

Victoria BC

Team Leader, Facility Attendant

2011–2017

Work in supervisory roles as a Team Leader and Facility Attendant to oversee multiple staff and ensure that programs are running safely and effectively.

- Team Leader: Directly supervise a team of lifeguards to ensure safe pool coverage, oversee first aid situations, mediate public relations situations and provide excellent internal and external customer service
- Facility Attendant: Responsible for overseeing all facility programs, coordinating and providing back-up for all staff and conducting emergency procedures in case of emergencies

Technical Projects

Full Stack Javascript: Currently developing a full stack application using Angular 4 on the front end and Node.js, Express and MongoDB on the back end. Implements an authentication system using JWTs.

Capstone Design: Worked in a team of students to develop a device to mimic the breathing action of human lungs

- Integrated multiple sensors and a linear actuator using a microcontroller to produce the mechanical breathing action of the device and to monitor several environmental conditions of the device such as humidity, CO₂ content, and temperature

Mechatronics: Designed the firmware to accomplish a conveyor belt sorting task

- Integrated multiple sensors, actuators and motors with a microcontroller programmed in C

Neural Networks: Designed a neural network to classify data instances in an online breast cancer database as malignant or benign

- Used MatLab to implement a three-layer feedforward neural network to automatically classify instances of breast cancer malignancy

Biomedical Image Processing: Solved task of retinal vessel segmentation in retinal images by using MatLab to implement adaptive local thresholding by multithreshold probing

References

Dr. Nikolai Dechev

Dr. Kelly Stegman-Brooks

Michael Sheehan

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