# **Jugal Chitkara**

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### **EDUCATION**

Computer Engineering BASc at University of Waterloo Class of 2024

Relevant courses: Fundamentals of programming (C++), Linear Circuits, Digital Circuits and Systems

# SKILLS

Languages: HTML, JavaScript, TypeScript, CSS, C++, Python, C#

Frameworks/Databases: NodeJS, Angular, React, Bootstrap, SQL, MongoDB, Redis

Tools/Technologies: Git, Jira, VS Code, XCode, MS SQL Server, Linux (Ubuntu), Bash, Postman, MS Suite

# WORK EXPERIENCE

# **Superheat,** Kincardine, Ontario (Remote)

Web Developer

Sept 2020 – Dec 2020

- Development of Websocket communication between client and server **NodeJS** applications
- **Full-stack** web development using NodeJS, **Redis**, **MongoDB**, and **MSSQL** for various data type and storage requirements
- Upgrading communication version of equipment affecting NodeJS client and server, memory models, Redis objects, API calls, and frequency + transmission of data.
- Modernizing outdated **HTML5** apps with **Angular**

#### Superheat, Kincardine, Ontario

Web Developer

Jan 2020 - Apr 2020

- Worked on a team of 4 developers in an **Agile** environment to create features/releases and maintain web application using **Angular** Framework for frontend and Loopback **NodeJS** framework for backend APIs.
- Source control and management were done using **BitBucket** and **Jira**.
- Assisted in developing new features and helped convert from **AngularJS** to **Angular.**

#### Framatome, Kincardine, Ontario

**Engineering Coop Student** 

Feb 2019 – June 2019

- Analyzed technical documents and design specifications for errors.
- Organized errors in MS Excel and presented findings to manager.
- Introduced to ASME and CSA standards through analyzing documents to meet industry standards

#### **PROJECTS**

#### Personal Website, www.JugalC.me

HTML, CSS

Personal website created in **HTML** and fully styled and animated by me in **CSS**. Project completed in **less than one day.** Site showcases basic web development skills and links to various socials and contact links.

#### PID Controlled Ball on Beam Balance,

Arduino/C++

Designed and implemented a system that uses PID control principles to balance a ball on a beam. Used ultrasonic sensor to find ball on beam and used servo motor to adjust angle.

# ACTIVITIES

#### FRC Team 781 Kinetic Knights,

Team Member

July 2015 - May 2017

- Participated in design of the robot using **Solidworks**.
- Assisted with writing the 2016 business plan.
- Collaborated with other team members to efficiently construct the robot and the test field.