

# MARK SAVIN

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A creative thinker, effective communicator with strong analytical skills, detail-oriented and proficient at maintaining professional relationships.

## Skills

### Programming

Java  
C  
MATLAB  
Python  
JavaScript  
HTML/CSS  
React  
Unix Shell Scripts  
SQL  
Firebase  
Data Structures  
Algorithms

### Operating Systems

Windows  
Unix/Linux

### Software

Microsoft Office  
Eclipse  
Visual Studio Code  
Jupyter Notebook  
Figma

### Professional Skills

Project Management  
Detail Oriented  
Dedicated Team Player

## Education

Bachelor of Engineering (B.Eng.): Software Engineering  
York University – Lassonde School of Engineering

April 2021

## Work Experience

### Shipping and Receiving

May 2017 – Sept. 2017

PerkinElmer – Bolton, ON

- Entrusted with crating mass spectrometers, ensuring safe and secure packaging for transport.
- Supervised co-workers, instructing them how to perform tasks and procedures safely and efficiently.
- Took the initiative to reorganize inventory bins, thus facilitating location of specific items.

### Engineering Documentation Intern

May 2016 – Sept. 2016

PerkinElmer – Bolton, ON

- Uploaded and updated company documents through supply chain management software (Epicor).
- Communicated with the company's vendors to ensure their products were RoHS compliant.
- Edited laboratory manuals and company documents to improve readability and followed-up with the authors of these documents to confirm the text was factually correct and up to date.

## Projects

### Hospital Communication System

Sept. 2020 – Apr. 2021

Capstone – Project Manager/Scrum Master

- Developed a web application using React for physicians and nurses to communicate with one another via text message, to improve their productivity in the workplace.
- Organized sprint planning meetings and turned high level user stories in the product backlog into more detailed tasks for the sprint backlog. This process made it easy to identify the sprint goal, so the team had a clear objective in mind.
- Led sprint review meetings to assess the quality of work that was done. Assessed team members' strengths and weaknesses, to assign tasks that were well suited for the individual, which led to an increase in productivity and quality work.
- Designed and implemented a database schema, in MySQL, that would capture the complex communication network in hospitals.
- Used Formik to get values in and out of form state, create validation and error messages, and handle form submission.
- Developed a notification system that enabled users to send, read, and delete messages. Firebase was used to store and retrieve those messages using CRUD commands.
- Webpages were made mobile responsive with the aid of Flexbox.

### Linear Least Squares Regression

Sept. 2020 – Dec. 2020

Machine Learning

- Trained a linear predictor of varying degrees to determine which degree minimized the square loss over the entire dataset (empirical risk minimization).
- Loaded the data into MATLAB, selected varying degrees of the polynomial from 1 to 30, and computed the empirical square loss on each learned function.
- Incorporated a regularization parameter to balance between the model's complexity and how well the model fit the data.
- Was able to conclude which degree and regularization parameter minimized the square loss over the entire dataset.