

# Johnatan Gao

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## EDUCATION

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### Polytechnique Montréal

*Bachelor of Engineering in Software Engineering (GPA: 3.7/4.0)*

Montréal, QC

Aug 2019 – May 2023

### Collège de Maisonneuve

*DEC in Computer Science and Mathematics*

Montréal, QC

Aug 2017 – May 2019

## TECHNICAL SKILLS

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**Languages:** Java, C/C++, Javascript/Typescript, C#, Python, Bash, SQL (MSSQL), HTML/CSS

**Frameworks:** Angular, Vue, .NET Core, Node.js, ExtJS, Jest, Cypress

**Developer Tools:** Git, Mercury, Docker, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse, Postman

**Libraries:** React, Express, Numpy, Bootstrap

## EXPERIENCE

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### Software Engineering Intern

*Pharonyx Technologies Inc.*

May 2020 – Sep 2020

Montréal, QC

- Developed a REST API using .NET Core Web APIs and MSSQL to allow external access to internal databases
- Developed a web application using Sencha ExtJS to generate API tokens allowing developers to use the REST API
- Developed custom pdf annotation tools in PDFTron to allow users to annotate more efficiently
- Optimised the pdf annotation tool's startup time by 15% by updating the tool's initialization code
- Wrote unit tests and integration tests in C# using the .NET Core framework to catch bugs

### Web Developer Intern

*Ludex Technologies Inc.*

Nov 2019 – May 2020

Montréal, QC

- Developed a pull-to-reload, and infinite-scroll web component using React.js
- Wrote unit tests in Jest to catch unwanted front-end bugs

## PROJECTS

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### Open Source Contributor | C/C++, HTML/CSS, Javascript, Java, Mercury

Dec 2020 – Present

- Contributed to the Firefox codebase by fixing various beginner friendly bugs in the desktop and Android version of Firefox

### Lightweight Scientific Calculator | Typescript, Webpack, Web Components, Jest, Git

Dec 2020 – Jan 2021

- Developed a responsive progressive web application using Typescript with Webpack for bundling
- Achieved a perfect Lighthouse score of 100 in all categories (Performance, Accessibility, Best Practices, and SEO)
- Published on the Google Play store and Microsoft Store with perfect reviews
- Tested everything with 100% code coverage for quality assurance using Jest

### Embedded Systems Project | C/C++, AVR GCC, Git

Sep 2020 – Dec 2020

- Developed a virtual ATmega324PA robot using C/C++ with AVR GCC tasked to complete various challenges in a virtual environment (SimulIDE)
- Established a collaboration model using the Gitflow branching model

## ACHIEVEMENTS

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### Fullstack Developer Certification | HTML/CSS, Javascript, React, Node.js, Express, Helmet.js, D3.js

Jan 2021

- Completed the entire FreeCodeCamp's fullstack developer certification which is estimated to be equivalent to 2000+ hours of work

### PolyHx Hackathon Finalist | Java, Git

Oct 2019

- Developed a smart fridge that recommends recipes based on the content present in the fridge in a team of 4 using Java
- Placed 2nd in our category (IOT) out of more than 120 teams