

# Swagat Samal

Full-Stack Developer | React.js | Node.js | JavaScript | TypeScript

Waterloo, Ontario, N2T 2T3 – Can relocate.

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Portfolio: <https://ssamal2801.github.io/3dportfolio>

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GitHub: <https://github.com/ssamal2801>

## HIGHLIGHTS

- **Nearly 2 years of industry experience** creating full-stack web apps in an Agile environment.
- Passionate about **code optimization, data structures, and algorithms**.
- Proficient in **object-oriented programming** languages like C#, C++, Java, and Swift.
- Experience with Unit Testing, Integration Testing, and User **Testing**.
- Proficient in creating wireframes using **Adobe XD** and **Figma**.
- Knowledge of agile project management tools like **Jira**, and **Azure DevOps** Boards.
- Experience with Software Development Life Cycle (SDLC) - **Agile and Waterfall**.

## EXPERIENCE

**Software Developer** - Sienci Labs, ON, Canada (June 2022 - June 2023)

- Optimized and added features to gSender, a **web and desktop** (Electron) app for operating CNC machines.
- Developed a workflow to visualize **3D G-Code models** using Three.js with  **$O(n^2)$**  time and space complexity.
- Improved data visualization performance by **9%**.
- Implemented **algorithms** for **4-axis visualization** of toolpaths using **WebGL**.
- Took part in **code reviews** and maintenance of numerous aspects of the product.
- **Skills:** React.js, Redux.js, JavaScript, TypeScript, Chart.js, Three.js, Node.js, Express.js, Electron.js, WebGL, Socket.io, Storybook, HTML5, CSS3, SCSS, LESS/Stylus, Jest, React Material UI.

**Software Developer** - Karmax Heavy Stamping / Magna Cosma, ON, Canada (Jan 2022 - April 2022)

- In a contract with Conestoga Applied Research.
- Worked in an Agile team of Full Stack developers and developed an attendance and production record system for an automobile parts manufacturing giant.
- Optimized **data retrieval by 5%** and **visualization by 12%**.
- Designed web pages using Vue.js, HTML, JavaScript, TypeScript, CSS, and page design principles.
- Used JSDoc for **code documentation** and performed **Unit and Integration testing**.
- **Skills:** Vue.js, JavaScript, HTML, SCSS, Node.js, TypeScript, MySQL, REST API, Postman, Jest, Azure DevOps.

**Student Software Developer** - Conestoga Applied Research, ON, Canada (Sept 2021 - Dec 2021)

- Developed a **digital twin** for Conestoga Applied Research to implement in their production labs.
- Designed web pages using Vue.js, HTML, JavaScript, CSS, and page design principles.
- Modified existing CAD files and used them on a web app to **visualize real-time sensor data**.
- Followed **agile methodology** for application development and performed **Unit testing**.
- **Skills:** Vue.js, Babylon.js, Kafka, JavaScript, HTML, SCSS, Node.js, MySQL, REST API, Azure DevOps.

## OTHER EXPERIENCE

**Customer Experience Specialist** (Aug 2018 - Jul 2020)

**Online Chat Representative** (Jun 2017 - Feb 2018)

Etech Global Services, Gandhinagar, India

- **Skills:** Internet and TV device troubleshooting, client interaction, selling hardware, scheduling tech visits.

## PROJECTS

**gSender** – A web and desktop (Electron) app with new features for easier CNC calibration, surfacing, tool changing, and firmware control.

- GitHub Link: <https://github.com/Sienci-Labs/gsender>

- **Skills:** React.js, Redux.js, JavaScript, TypeScript, Chart.js, Three.js, Node.js, Express.js, Socket.io, Storybook, HTML5, CSS3, SCSS, LESS/Stylus, Electron, Jest, React Material UI.

**WHIM** – A MERN stack web application that helps users find and learn new hobbies.

- GitHub Link: <https://github.com/ssamal94/whim-frontend>

- **Skills:** React.js, JavaScript (ES6), HTML5, SCSS, MongoDB, JWT web token, React MUI, APIs.

**WHIM-Backend** – A Node.js application to manage WHIM's business logic and database.

- GitHub Link: <https://github.com/ssamal94/whim-backend>

- **Skills:** Node.js, JavaScript (ES6), MongoDB, JavaScript Web Token (JWT), Azure DevOps.

**Student Record System** – A React.js app that fetches data from an API to display and search through records.

- GitHub Link: <https://github.com/ssamal94/students-record>

- **Skills:** React.js, JavaScript (ES6), HTML5, SCSS, React MUI, APIs.

## EDUCATION

- **Post-Graduate Certificate, Mobile Solutions Development (Co-op)** (Jan 2021 - April 2022)

Conestoga College, Waterloo, ON

- **Bachelor of Technology, Computer Science** (August 2013 - June 2017)

Biju Patnaik University of Technology, India

## VOLUNTEER WORK

- Did multiple motorcycle charity shows to raise money to help flood victims of Andhra Pradesh in 2016.

- Student volunteer at Rotaract Club to help girl children gain access to primary education in rural Odisha.