

# SIDDHARTH KURNAL

📍 Edmonton, Alberta, Canada

Phone: [780.860.1246](tel:780.860.1246)

Email: [siddharthkurnal@gmail.com](mailto:siddharthkurnal@gmail.com)

LinkedIn: [linkedin.com/in/siddharth-kurnal](https://www.linkedin.com/in/siddharth-kurnal)

GitHub: [github.com/skurnal2](https://github.com/skurnal2)

Portfolio ★: [www.siddharthkurnal.com](http://www.siddharthkurnal.com)

Experienced software developer with under **5 years** of expertise, creating high-quality, visually stunning, and user-friendly web experiences focused on performance and accessibility.

December 2020 - Present (4 Years)

## BIS Safety Software

Sherwood Park, Alberta

### Senior Full Stack Developer June 2023 - Present

- Built an AI Chatbot Agent using **Pinecone** through Retrieval-Augmented Generation (**RAG**), reducing support inquiries by **50%** and enabling faster resolution times.
- Managed a team of developers for major AI-related projects, streamlining development workflows to achieve a **40%** reduction in development time.
- Designed and deployed a Node.js WebSocket server on **AWS EC2**, enabling user session tracking, reducing database load by **30%**, and improving system stability by **eliminating long polling**.
- Developed an AI-powered form generation tool using OpenAI API, cutting form creation time by **40%** and significantly boosting productivity

### Full Stack Developer December 2020 - June 2023

- Created an optimized settings page with React-Redux and Redis caching, reducing page load times by **100%** and improving support.
- Developed a recursive location tree management system with drag-and-drop functionality, increasing nested data handling efficiency.
- Spearheaded development of a reusable component library hosted on NPM, reducing UI development time by **50%** and ensuring design consistency.
- Implemented RESTful APIs and automated FTP imports, eliminating all manual data transfer tasks for clients.
- Ensured compliance with **SOC2**, **PIPA**, and **PIPEDA**, maintaining security and privacy for an application serving over **2 million users**.

July 2020 - October 2020

## Aimsio

Calgary, Alberta (Remote)

### Implementation Developer Intern

- Created custom forms for web and mobile applications using Aimsio framework and MySQL.
- Improved report generation efficiency by **30%** using SCSS and JavaScript.
- Engaged with clients to understand and implement tailored solutions.

January 2020 - April 2020

## NAIT Capstone

### Project Lead / Web Developer

Professional Work Experience

May 2018 - April 2020

Northern Alberta Institute of Technology (NAIT)

Edmonton, Alberta

🎓 *Digital Media and IT (Computer Software Development) ~ 4.0 GPA*

- Web Design/Development
- Application Development
- Mobile Development
- Database
- System Analysis
- Networking
- Software Testing
- Project Management

Education

Skills

- *Languages & Frameworks*
  - JavaScript
  - TypeScript
  - C# / .Net / LINQ
  - PHP
  - Java
  - Adobe ColdFusion
- *Frontend*
  - React / Redux
  - AngularJs
  - NextJs
  - SASS / Tailwind
- *Backend*
  - Node.js Runtime
  - Entity Framework
- *Databases*
  - MySQL / MariaDB
  - Microsoft SQL Server (T-SQL)
  - Redis
  - Pinecone (Vector)
  - DynamoDB
- *DevOps & Tools*
  - AWS (ELB, S3, RDS)
  - Git
  - VS Code / Cursor
  - Visual Studio
  - Docker
  - GitHub Actions
  - JIRA / Trello
- *Mobile*
  - Swift - XCode
  - Android Studio

Selected Projects

- *Chatbot Agent and Knowledge Base using RAG*
  - Used **Pinecone** to store and retrieve embeddings efficiently, enhancing chatbot query accuracy.
  - Implemented Retrieval-Augmented Generation for seamless integration of external knowledge into context-aware responses.
  - Utilized event streaming for real-time markdown rendering in chatbot responses.
  - Managed a Python server on **AWS EC2** for scalability and reliability. Used **AWS S3** for Knowledge Base uploads.
  - Developed a modern chatbot interface with React, **Context API**, and efficient state management using local storage and session
- *User Session Tracking using Websockets and Redis*
  - Built a **Node.js WebSocket** server on an **AWS EC2** instance to manage user login states and track page statistics.
  - Implemented session management by integrating Redis, enabling efficient tracking and storage of user sessions.
- *React Component Library using Storybook.js*
  - Developed a React component library on **NPM**, ensuring consistency and reducing development time.
  - Eliminated duplicate components, streamlined usage, and kept the library updated.
  - Integrated **Storybook.js** for interactive documentation, improving onboarding and collaboration for **70 developers**.
- *HighwayDodge - Cross-Platform Game using Java*
  - Developed a mobile game for **Android** and **iOS** using the **LibGDX** framework with **Android Studio** and **Java**.
  - Managed game play states across screens and utilized the device gyroscope for motion and acceleration tracking.
- *LA Auto Detail - Service & Vehicle Management System*
  - NAIT Capstone - Led a team of 5 developers in the development of an SEO-optimized public website and a backend application for managing vehicles and services.
  - Used C#, ASP.NET, Entity Framework with **LINQ** and T-SQL for backend, and SASS / **Bootstrap** for frontend styling.

Many More Projects