

Arnav Dalmia

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TECHNICAL SKILLS

Languages: Java, Python, C++, SQL, JavaScript/React, HTML/CSS, Lua, Gosu

Tools: Spring Boot, FastAPI, Firebase, WordPress, MongoDB, REST APIs, Postman, SICK Vision, Kraken, Git

EXPERIENCE

Robotics and Project Engineering Assistant

Jan. 2024 - May. 2024

Pacline Overhead Conveyors

Mississauga, ON

- Redesigned conveyor-belt components using **SOLIDWORKS**, enabling engineers to spend **93% less time** while creating client-specific 3D solutions and simplifying inventory management
- Integrated **SICK Vision** Camera into **Yaskawa Robotics** system, using **Lua and SICK API ML image processing**, enabling system to categorize boxes by dimensions with an 1/8" precision
- Utilized **Dynamics CRM and NAV** for client communication, quoting, and invoicing. Collaborated with engineers on custom conveyor designs, managing projects from inception to completion

Manufacturing and Assembly Technician

July 2023 - Aug. 2023

Pacline Overhead Conveyors

Mississauga, ON

- Fulfilled **100+ work** orders using diverse machinery, ensuring client satisfaction
- Fabricated conveyor components using welding, machining, and interpreting drawings
- Led** innovative custom stand frames project, establishing **successful** international shipping **standard**

Electrical And Strategy Lead

Sep. 2021 - July. 2023

First Robotics Canada Team 1325 - Inverse Paradox

Mississauga, ON

- Led electrical and strategy teams for 2022 and 2023 robots, resulting in **10 successful competitions** regionally, provincially, and **World Championships**
- Trained team members and managed all electrical components, ensuring top-quality performance and ranking among **the top 5 in Canada** and among the best in the world
- Oversaw scouting data and strategy formulation, leading to exceptional team performance and successful seasons

Front End Developer

Jan. 2022 - July. 2023

Contract Temporary

Remote

- Designed **10+** websites using **HTML** and **Bootstrap CSS Framework**, utilizing industry-standard tools such as **Brackets** and **Pages** for efficient development and deployment
- Engaged in **direct client communication** to gather and comprehend website requirements, including the implementation of **responsive contact forms** and **Google Extensions**
- Enhanced user experience through the **creation of visually appealing and intuitive user interfaces** using front-end technologies, ensuring **cross-browser compatibility** and **mobile responsiveness**

PROJECTS

CineVista | Java, Spring Boot, MongoDB, React, HTML/CSS, Bootstrap, Postman, AWS

March 2024

- Developed a full-stack web application using **Sprint Boot, React, Bootstrap**, and **MongoDB**
- Developed a **RESTful API**, performed **CRUD** operations, and tested API functionality using **Postman**
- Designed front-end using **React** and **Bootstrap**, and deployed using **AWS Amplify**

Human Resources Management Tool | Java, MySQL, JDBC, JIRA

July 2023

- Designed a user-friendly HR management software for HR personnel to access and manage employee records
- Created a comprehensive **SQL database** with **100 unique employee entries** and established a **secure connection** to the SQL server using **JDBC**, enabling efficient data storage, retrieval, and **real-time updates**
- Achieved **99.9% data accuracy** using error-checking mechanisms, enhancing **software reliability by 20%**

MedLet | Python, NFCpy API, NFC Tools, HTML, CSS, Bootstrap, WIX, JIRA, SOLIDWORKS

July 2022

- Won **Top Overall Project Award** at the **University of Western Ontario SHAD Design Competition**
- Designed medical wearable using **CAD & NFCpy** to securely store **emergency information for children**
- Developed UI using **Bootstrap, HTML, and WIX**, ensuring a user-friendly experience for customers

EDUCATION

University of Waterloo

Waterloo, ON

Bachelor of Applied Sciences in Systems Design Engineering

Sep. 2023 - Present