Harsh Malhotra

📞 647-965-2497
✉ harshm@my.yorku.ca
in /HarshMal
⌂ /HRoses
🌐 harshmalhotra.ca

⚙ Skills

Languages: Java, JavaScript, SQL, HTML, CSS
Framework & Libraries: Node JS, Express JS, Three JS, Puppeteer JS, Mongoose(ODM)
Databases: PostgreSQL, MySQL, MongoDB
OtherTools: Git, Github, Postman, Playwright

🎓 Education

York University - Lassonde School of Engineering   Oct 2024
BA - Computer Science | GPA: 3.8/4.0   *North York, ON*
· *Relevant Courses: DBMS, OOP, Data Structures*

University of Toronto   2014 – 2019
HBSc - Biochemistry Specialist   *Toronto, ON*

⚗ Projects (More on my website)

News-Nerd - FullStack App Node.js, Puppeteer, MongoDB
> Developing a full-stack application that aggregates and displays the latest updates from CP24 World News, BBC TechNews, and the FreeCodeCamp YouTube channel on a single page, creating a convenient and comprehensive news source
> **Aiming** to compile and store data in MongoDB to conduct **trend and sentiment analysis** using **Google Cloud APIs**.

CinemaCatalog Node, Express, MongoDB, Postman
> Created a robust API meant for retailers/online stores to manage and efficiently store movie data, adhering to **RESTful principles** and **MVC Architecture**.
> Implemented **CRUD** functionality for movie data including genre grouping and **search functionality** like filtration, limiting, and pagination; allowing seamless interaction via **HTTP requests**.
> Wrote a **custom script** to automate data loading and handle deletions within the database, streamlining database management and data consistency.

H2O Helper Java, Firmata4J Library, Arduino
> Created an **event-driven system** with practical application in plant nurseries, farms or personal gardens that triggers water pumps based on soil moisture level.
> Leveraged Firmata4J API for communication between **hardware and software**.

🕐 Work Experience

Analytical Instrument Specialist   May. 2021 - Feb. 2022
Toronto Research Chemicals   *North York, ON*
> Proficient in operating Bruker Ascend & Ultra 400 MHz NMR instruments for advanced chemical structural analysis, and skilled in operating 2400 CHNS Organic Elemental Analyzer (CHN) for determining elemental composition.
> Analyze data sets to **identify trends** and instrument faults, promptly resolving issues to maintain **accurate and reliable results**.
> Fostered effective communication and **collaboration** with scientists to ensure precise chemical analysis using NMR and CHN techniques, guaranteeing testing accuracy and **high-quality results**.

Analytical Chemist   Sept. 2019 - Aug. 2021
Toronto Research Chemicals   *North York, ON*
> Conducted thorough analysis and characterization of chemical products, demonstrating **attention to detail** and adherence to protocols and specifications.
> Compiled and **interpreted data** from multiple tests, showcasing analytical and data interpretation skills.
> Maintained clear and **effective communication** with instrument operators, ensuring the **exchange of critical information** related to hazards, techniques, and methodologies.