

## Education

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Massachusetts Institute of Tech.	Cambridge, MA	Expect Spring 2024
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- **B.S.E.** in Computer Science and Electrical Engineering. **GPA: 4.7 / 5.0.**
- **Completed Coursework:** Computational Structures; Math for CS; Algorithms; Fundamentals of Programming; Embedded Systems; Multi-variable Calculus;
- **Fall 2022:** Linear Algebra; Design and Analysis of Algorithms; Machine Learning;

## Software Engineering Experience

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MIT EECS Dept.	Undergraduate Researcher	Summer 2022
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- Designed algorithms to filter, organize, and sort n-grams from 10TB of online metadata.
- Implemented online API integration by creating script which extracts metadata frequency from Google Books.
- Optimized software by implementing caching, leading to 50% reduction in running time.
- Reduced file storage by 75% by utilizing unique file format and ASCII characters which led to faster load.
- Designed GUI interface for friendly and easier use.

Ek Kadam Aur	Data Science Intern	Summer 2022
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- Devised system on collecting and interpreting data for disabled students in a classroom setting, which has the potential of leading to a newer style of teaching methods for students with eye disability.
- Designed data structures which lead to an overall 20% efficiency increase.
- Engineered and designed software for easier access and interpretation of student data.
- Presented software and findings to the Board Of Directors.

MIT Material Science Dept.	Research Software Developer	Spring 2021
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- Established algorithms for processing chemical data for unique compounds which optimized software speed.
- Designed graphs for calculations, which lead to a better informative visual about the reactivity.
- Optimized speed of algorithms by utilizing different data structures, which increased speed by 20%.
- Uploaded code along with graduate student research for the use by other colleges / research offices.

## Personal Projects

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- **Real Life Mario Kart** (2022). Inspired by Mario Kart on the Switch, designed and created a real life version of Mario Kart by software, hardware, and server side code. **C++; Arduino; Python; SQL-Lite; ESP32; API;**
  - **Personal Weather Man** (2022). Created a hardware that scrapes data from weather API for accurate weather information by means of software and hardware. **C++; Arduino; API; ESP32; JSON;**
  - **Performance Data Analyzer** (2022). Designed and engineered a data analyzer / cleaner. Software correctly identifies relevant / important information and categorizes data. **Python; CSV;**
  - **Restaurant POS System** (2021). Digitizes restaurant menu which created a fast and efficient working environment for both customers and managers. **Python; SQL-Lite;**

## Languages and Tools

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- **Python** (expert); **C++** (moderate); **Java** (prior experience); **HTML** (fluent); **CSS** (prior experience); **Assembly** (prior experienced); **Minispec** (prior experienced); **SQL-Lite** (prior experience);
  - Visual Studio; Vim; Nano; JSON; Database; Online API;