

GitHub: sheerio  
Vancouver  
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# Gunbir Singh Baveja

Website

## EDUCATION

### Bachelor of Science

Sept 2022 - Present

*University of British Columbia, Vancouver*

- GPA: 3.95/4.0, Dean's List 2023
- Software Member@Open Robotics, Data Science Club, Undergraduate Mathematics Society, ACM
- Relevant Coursework: Software Construction, Introduction to Data science, Models of Computation, Systematic Program Design, Introduction to Computer Systems, From Linear Models to Deep Learning (edX)

### Physics, Chemistry, Mathematics, and Computer Science

April 2022

*Delhi Public School, Dwarka*

- Vice President of Student Council, Multimedia Head of Computer Science Club, Tech Head of Science Clubs.

## WORK EXPERIENCE

### Research Intern, PyTorch, OpenCV, Python

June 2023 - August 2023

*Delhi Technological University, Delhi (formerly DCE)*

*Delhi, India*

- Under the supervision of Dr. Indu Singh: formulated, designed and implemented a novel palmprint recognition architecture with histogram equalization with FALF-SVR, a pre-activated Inv-ResNet block with spatial attention and global-local JFPA-ROA search-matching.

### Machine Learning Intern, TensorFlow, OpenCV, MongoDB, Python

April 2020 - July 2020

*Bausch + Lomb*

*Gurugram, India*

- Used data augmentation, incremental learning, and unsupervised learning to create a large scale model for inventory management.

### Research Intern, Python, SKLearn, Tensorflow, MATLAB

August 2020 - November 2020

*GD Goenka University*

*Sohna, India*

- Conducted research under the supervision of Dr. Jaspreet Singh in the department of Computer Science and Engineering
- Created an earthquake magnitude prediction model using Extreme Learning Machines and Support Vector Machines.
- Research was accepted at the Regeneron International Science and Engineering Fair 2021.

## PROJECT

### Discord Bot for beetter lang-to-lang communication

July 2023

<https://github.com/sheerio/alokhe-bot>

- Created a discord bot using JavaScript that used Alokhe API and OpenAI API that can transliterate between english and hindi and hinglish (hindi written in the latin alphabet) to hindi (written in devanagari).

**Alokhe**

**February 2022**

<https://github.com/sheerio/alokhe>

- Developed symbolic code to perfectly transliterate from English to Hindi using phonosyntactic rules of linguistics.

**AutoTechnoblade**

**November 2020**

<https://socialblade.com/twitter/user/autotechnoblade>

- Created a Twitter bot by fine-tuning GPT-2 on Technoblade's tweets. Account was successful and gained 26,000 followers in 4 month.

**12 Minutes: Text Adventure Game**

**January 2023**

<https://github.com/sheerio/text-adv-game>

- Developed "12 Minutes" using Java, creating a minimalist text-based adventure game with button-based interactions with multiple endings.
- Implemented resource management and puzzle-solving mechanics, relying on environmental cues rather than dialogues for storytelling.
- Incorporated user-requested features, such as inventory management, crafting, combat, and interaction with NPCs and items, all programmed in Java.
- Provided customization options, enabling players to toggle display modes (light/dark) and sound settings (mute/sound on) through Java-based interfaces and other UI elements using Java's Swing library.

## ACHIEVEMENTS

- **Second Award, Global Youth Science and Technology Bowl:** independent project. Awarded by The Hong Kong Federation of Youth Groups.
- **Grand Award, IRIS National Fair:** Selected amongst around 1000 teams to represent India at the Intel Science and Engineering Fair. Awarded by the Ministry of Science and Technology of India.
- **Finalist, Intel Science and Engineering Fair.** Represented India at the largest science fair in the world.
- **Most Outstanding Exhibition in STEM, IRIS National Fair:** awarded by Yale Science and Engineering Association to 1 team/student at the IRIS National Fair.
- **Bronze Medal, Asia Pacific Linguistics Olympiad (APLO):** selected as team alternate for India at the International Linguistics Olympiad (IOL) 2022. APLO Rank 8, PLO Rank 11.
- **Outstanding International Student Award,** UBC Vancouver (\$10,000)

## SKILLS

<b>Frameworks</b>	OpenCV, fastai, PyTorch, Tensorflow, SciKit/XGBoost
<b>Programming</b>	Python, Java, C/C++, Git, L <sup>A</sup> T <sub>E</sub> X, Matlab, Markdown
<b>Communication</b>	Hindi (native), English (native), Punjabi (beginner), French (beginner)
<b>Graphics</b>	Blender, Autodesk Maya, Unreal Engine, Adobe Illustrator