

Kieran Paranjpe  
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## EDUCATION

**McGill University** - GPA: 4.00/4.00 2023 - Present  
Pursuing an undergraduate degree in Computer Science and AI. Coursework completed in Java, Assembly and Bash.  
**Lord Byng Secondary School** - GPA: 97% 2018 - 2023

## WORK EXPERIENCE

**LEGO Robotics Lead Camp Instructor** - *STEMphilic Education* 2022 - 2023

- Taught LEGO Spike Prime to students aged 5-13 at a spring and summer camp.
- Responsible for creating lesson plans to target a multitude of ages, teaching to a group and individually.

**LEGO Robotics Assistant Camp Instructor** - *Daedalos Enrichment Programs* 2021

- Taught LEGO Mindstorms and LEGO WeDo to students aged 5-13 at a summer camp.

## EXTRACURRICULAR EXPERIENCE

**FIRST Robotics (Team Canada & Tech Challenge)** - *Captain, Programmer, Designer* 2019 - 2023

- Captained FIRST Tech Challenge robotics team #16267 to top 3 provincial finishes twice & a world championship appearance.
- Was one of 5 people to represent team Canada internationally in 2022 for FIRST Global Challenge.
- Programmed the logic for both remote controlled and autonomous mode with Java and Android Studio.
  - Successfully implemented computer vision, odometry and localisation algorithms, PID and a state machine.
  - Used abstraction to make code more accessible to team members with less programming experience.
- Designed and built key components of the robot including drive trains, linear slides, mechanical claws and arms, flywheel ball launchers and a climbing winch using Fusion 360.
- Taught and led LEGO robotics workshops for youth in the area.

**Relevant skills:** Java, Android Studio, Fusion 360, Leadership

## PROJECTS

**Shorts News** | Devpost: <https://devpost.com/software/shortsnews> 2024

- McHacks 11 submission. Automatically generates YouTube shorts videos based on news articles.
- Implements 9 different technologies including 5 APIs.
- Applied AI to summarise articles and designed around the YouTube API for automatic video uploads.

**Relevant skills:** Python, GitHub

**Spotify Stats & to MP3** | Deployed Code: <https://music-stats-kieran-paranjpe.vercel.app/homepage> 2024

- Built a web app using React.js and Next.js to display information about a user's Spotify account.
- Displays top songs, artists and genres for 3 different timeframes using the Spotify Web API.
  - Developed a custom algorithm to find a user's top genre because Spotify does not expose this by default.
- Assembled a system to query YouTube based on a user's Spotify library.
  - Using information from YouTube search, the app downloads the song's mp3 into storage.
- Implemented NextAuth to handle authentication with refresh tokens.

**Relevant skills:** Typescript, React.js, Next.js, Javascript, GitHub, HTML & CSS, Tailwind CSS

**Audio Visualiser** | Deployed Code: <https://audio-visualisers-b0876.web.app/> 2023

- Developed a web app using p5.js to display audio visualisations for the device's currently playing music.
- Used the Spotify API to match the colour scheme of the visualiser to the colour scheme of the given album cover from which the song is playing.
- Developed around the Audio Context API to listen for currently playing audio from the device.

**Relevant skills:** Javascript, p5.js, HTML & CSS

**Processing Projects** | Source Code (for all): <https://github.com/kieranparanjpe> 2020 - 2023

- Programmed and developed many applications using Processing in Java.
- Made a program to zoom on the Mandelbrot set, online chess, 3D shooter, asteroids, choose your own adventure text based game and online tic-tac-toe.

**Relevant skills:** Java, Processing

**Unity Game Development** | Deployed Code: <https://kieranparanjpe.itch.io/> 2016 - 2022

- Individually created 8 desktop games and 4 mobile games in both 2d and 3d using the Unity game engine, C# and blender. Deployed games to itcho.io and Google Play Store.
- Developed platforming mechanics, first/third person shooter mechanics, multiplayer mechanics, endless runner mechanics and active ragdoll mechanics among others using object oriented principles.
- Successfully set up Unity Ads to earn revenue from mobile games.
- Implemented Firebase databases to effectively store user data online and communicate with website frontend.
- **Relevant skills:** C#, Unity, Firebase, Blender, Javascript, HTML & CSS

## SKILLS SUMMARY

**Programming Languages:** C# | Java | HTML & CSS | Javascript | Typescript | Python | Assembly | Bash  
**Softwares/Programs:** MS Office | GitHub | Fusion 360 | Blender | Photoshop | Firebase | JetBrains IDEs  
**Soft Skills:** Self Directed Learning | Leadership | Teamwork | Perseverance | Teaching | Communication