# Divij Dhiraaj

Website | divijdhiraaj@gmail.com | LinkedIn | Github | StackOverflow | Youtube

#### EDUCATION

## McMaster University $3^{rd}$ year

Hamilton, ON

Bachelor of Applied Science – Computer Science Gpa: 3.4 , Awards: Dean's Honour List

Aug. 2021 - May 2025

Courses Taken: Automata and Compatibility, Concurrent Systems, Computer Architecture, Databases, Data Structures and Algorithms

#### TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL (Postgres), JavaScript, HTML/CSS, Dart, C#

Frameworks: ReactJS, ThreeJs, Node.js, WordPress, Flutter, Electron

Developer Tools: Git, FireStore, VS Code, Visual Studio, PyCharm, IntelliJ, Vim/NVim, Eclipse, XCode, Power

Automate, IOS dev, Android Dev, Unity, WordPress Libraries: Pandas, NumPy, Matplotlib, Pygame

#### EXPERIENCE

#### IT Technical Assistant

July 2022 – Present

Systems Department, Office of the Registrar

McMaster University, ON

• Tasked with the management of internal systems

- Developed software needed by departments to function optimally like a Bulk SMS sender leveraging Python and Twilio's API to send RSVP reminders to thousands of graduates, resulting in 70% more convocation RSVPs
- Performed necessary repairs on an inventory of malfunctioning PC's
- Created a photo ID upload tracker using Python and displayed it using Microsoft Power Automate to track the amount of photo uploads

#### Projects

#### Project Pythia | ReactJs, ThreeJs, Python, TensorFlow

Oct 2023 - Oct 2023

- Developed a machine learning model that leverages data from the DSCOVR satellite to predict the KP index, a critical space weather parameter, resulting in a model accuracy of 89%
- Selected as a global nominee representing Hamilton in the Global Space Apps Hackathon
- Co-authored a research paper to document the model's methodology, findings, and implications
- Created an interactive ThreeJS website that displays model predictions dynamically

#### **Boids** | Python , Pyame , Classes/Objects , Simulation

May 2022 – July 2022

- Simulated the natural phenomenon of <u>Boids</u> using ideas from cellular automaton, through Python's pygame library
- Utilized proper OOP principles such as using classes and objects to build the project
- Implemented intuitive and interactive UI elements to customize the behaviour and quantity of boidal formations

### <u>TickIT</u> | Dart, Flutter, Firebase, IOS, Android

June 2020 – Feb 2021

- Developed a full-stack mobile application using the Flutter Framework, connecting it to a backend Firestore server enabling cloud syncing and deployed it on the Google Play Store
- Enabled users to add and remove tasks seemlessly, with all their tasks synced to the cloud and available on all their devices along with a Sign-in page and User Authentication
- Tailored a variety of aesthetic and minimalistic themes that the user can select from and change on the fly

#### **Brevity** | Python, AssemblyAI

Jan 2021 - Jan 2021

- Made a lecture summarizing terminal interface that takes in a lecture video, converts it to a transcipt and feeds
  that transcipt to AssemblyAI to get a customizable summary back
- During the COVID lockdown period, this program was employed by students due to the prevalence of recorded lectures

#### Solitude | Unity, C#, Game Dev

Aug 2022 – Present

- Developing a game about artificial loneliness and isolation using the Unity Game engine and C#
- Making developer logs on Youtube to share its ongoing progress