

# Daiwik Pal

(774) 541-0162 | daiwikpal@gatech.edu | linkedin.com/in/daiwik-pal | github.com/daiwikpal

## Education

**Georgia Institute of Technology** | Atlanta, GA

Bachelor of Science in Computer Science; GPA: 3.75

Clubs: Bits of Good – Hack4Impact, Data Science Club, WebDev Club

August 2022 – May 2025

Deans List

**Worcester Polytechnic Institute** | Worcester, MA

Dual Enrollment Classes with Massachusetts Academy of Math and Science; GPA 4.00

August 2021 – May 2022

Presidents List

## Skills

**Languages:** Java, Python, JavaScript, HTML, CSS, C/C++, LC-3 Assembly, R, Racket

**Technologies:** Next.js, React.js, MongoDB, Flask, Github, Android, Java Spring Boot, Tensorflow, GCP Vertex AI, Google AutoML, Google Collab

## Experience

### Peak Technologies

May 2023– Present

Machine Learning Engineering/Software Engineering Intern

Greater Boston Area, MA

- Designed and developed an end-to-end ML Application using Flask, JavaScript, and Python by deploying an object detection model using the Tensorflow.js library
- Allowed clients to easily demo Peak's package detection models and analyze key model metrics locally on edge devices
- Developed a pipeline using Node.js and Flask to automate model execution on datasets (88000+ images) and with a process to monitor and evaluate the performance and accuracy of deployed models
- Reduced pipeline latency by 200ms by refactoring redundant code and minimizing costly session storage calls
- Spearheaded research and design for backend architecture to store and perform object tracking on warehouse videos using MongoDB, Java Spring Boot, and Python

### Siena Analytics

June – August 2021, March - August 2022

Data Analytics Intern

Greater Boston Area, MA

- Migrated local running ML models to Google Cloud Platform Vertex AI
- Increased model efficiency through researching and implementing Google Brain Team's EfficientDet-D0 Object Detection model on Vertex AI

## Organizations

### Bits of Good – Georgia Tech Hack4Impact Chapter

Jan 2023 – May 2023

Software Developer

Atlanta, GA

- Created real-world webapps for local non-profits in the Atlanta region
- Developed the following CRUD webapps using React, Next.js, MongoDB, and RESTful API in an Agile workflow:
  - Better PokeAPI – created custom API endpoints to extend usability of PokeAPI using Next.js
  - Animal Training App – built frontend & backend functionality to manage different users, animals and training logs using Next.js, MongoDB, and implementing authentication features using “bcrypt” encryption library

## Projects

### MiceUp – Embedded Software Engineer | C++, Python, Arduino, Raspberry Pi

March 2021 – Jan 2022

- Designed and built a mouse that minimizes the effects of Parkinson's on cursor motion
- Devised a novel “tilt mechanism” that performs all clicking functions using a gyroscope and microcontroller
- Engineered mouse's circuitry and C++/Python code to communicate to a host computer using RS-232C protocol

### Predicting COVID-19 Transmission Risk | Python, Pandas, StreamLit

Sep 2020 – Nov 2021

- Conducted an independent research project to develop a probabilistic model that calculated COVID-19 transmission risk
- Developed a webapp that allows users to compare the transmission risk of contracting COVID-19 between two venues
- Users enter their personal and venue info to receive a predicted transmission risk comparing two venues
- Used Python, Pandas, and the Streamlit Framework for backend and Streamlit Framework for frontend

## Awards & Certifications

- Data Science with Python Certification:** Grow with Google and Simplilearn May 2023
- Massachusetts Science and Engineering Fair:** 1<sup>st</sup> Place Award, Foundation Medicine Award May 2021
- Massachusetts Junior Academy of Science Research Symposium at MIT:** Finalist, Presenter Oct 2021
- CyberPatriot - Cyber Security Competition:** 2<sup>nd</sup> Place State Award – Platinum Tier Nov 2021
- Savage Soccer Robotics Competition at WPI:** Finalist Award Nov 2019