


JOSEF MACERA

Pittsburgh, Pennsylvania

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Education

Carnegie Mellon University

Bachelor of Science, Electrical & Computer Engineering

Aug. 2023 – Present

Pittsburgh, Pennsylvania

Experience

Pipeline AI

Full Stack Developer

Jul. 2023 – Oct. 2023

Remote

- Designed interactive and mobile user interfaces for an AI sales integration platform in Next.js, React, and Tailwind.
- Handled business and payment logic for users with Stripe and modified AI-based content generation to significantly improve load times

Arafa Tech Foundation

Chief Technical Officer

Feb. 2023 – Sept. 2023

Remote

- Led a team of 10 developers to deliver
- Spearheaded a mentorship program with 12 members to match aspiring developers with 3 experienced software engineers in the industry. Held weekly meetings to establish learning plans and track progress.
- Held weekly workshops and wrote blogs on various programming topics.

Pacific Mist Music

Private Music Teacher

Aug. 2021 – Jul. 2023

Reno, Nevada

- Taught piano and guitar at homes and schools to 9 elementary/middle school students.
- Developed lesson plans and coordinated with parents on performance opportunities. Raised money for local elementary schools through lessons.

School Simplified

Chief Information Officer

May 2022 – Feb. 2023

Remote

- Organized the IT department into three teams and conducted recruiting for four leadership positions; held regular meetings with team managers and developers.
- Coordinated with other corporate officers and executive directors in assisting with rebranding and company restructuring to optimize team efforts and resource allocation.

Projects

Spellword | *Nuxt, Tailwind, Nest.js, Prisma, PostgreSQL, Railway, Tauri* | spellword.xyz

Apr. 2023

- Developed a realtime competitive web-based game designed to encourage vocabulary aquisition in an entertaining way.
- Implemented WebSockets and JWT authentication-based REST APIs adhering to OpenAPI standards.
- Created CI/CD workflows to automatically build native executables for all desktop platforms and Android on new releases with Tauri.
- Published to Steam and used Capacitor to build native Android/iOS executables. Won 1st place in Game Applications at Nevada FBLA.

Oinkers | *Vue, Capacitor, Heroku, JavaScript*

Nov. 2020

- Created an interactive finance management app. for young adults and teenagers. Deployed on Google Play.
- Hosted multiple VMs on Google Cloud Platform to serve the backend API, written in TypeScript.

Community Involvement

ScottyLabs

Member, Tech Committee

Aug. 2023 – Present

Carnegie Mellon University

Tartan Autonomous Underwater Vehicle Team

Member, Electrical

Aug. 2023 – Present

Carnegie Mellon University

Robotics Club

Co-Founder

Aug. 2022 – May 2023

Damonte Ranch High School

- Designed, programmed, and built VEX robots following the engineering design process.
- Organized team supplies and created funding opportunities from local universities and state programs. Raised over \$3000 for competition costs and building materials.
- Won 3 local competitions and competed in the VEX Robotics World Championship alongside the JROTC team.
- Travelled to local middle/elementary schools to recruit members and promote STEM engagement in school

Technical Skills

Languages: Python, TypeScript, C++, HTML/CSS, SQL

Technologies/Frameworks: Linux, GitHub, Nuxt / Vue, React, TailwindCSS