# Emanuel Z. Kuflik

Phone: (914) 255 3467 | Email: mannykuflik@gmail.com

#### **EDUCATION**

University of Pennsylvania, Philadelphia, PA

Sept 2016 - May 2021

Bachelor of Science in Computer Engineering, Minor in Mechanical Engineering, graduated May 2021

#### **Relevant Coursework:**

Computer and Information Science: Modern Operating Systems, Embedded Real-Time Software, Advanced Software and Algorithms, Programming Languages and Techniques, Mathematical Foundations of Computer Science, Computer Systems and Architectures, Professional Software Design, Computer Organization and Design

*Electrical and Systems Engineering*: Digital Audio Manipulation, Electrical Circuits and Systems, Embedded Systems Laboratory, Circuit-level Modeling and Optimization, Networked Systems, Internet and Web Systems

*Mechanical Engineering and Applied Mechanics*: Mechanical Design and 3D Modeling, Statics and Strength of Materials, Mechanical Design Laboratory, Integrated Product Design, Control for Autonomous Robots

iXperience, Cape Town, South Africa

May 2018 - July 2018

Intensive full-stack app development study abroad course

Ashreinu, Bet Shemesh, Israel

Sept 2016 - June 2017

Gap year Studied: philosophy, existentialism, theology

Community service: food pantry, working with kids at risk, building shelters for the homeless

#### **EMPLOYMENT**

Pagame, Santa Cruz, Bolivia

May 2020 - Sept 2020

*Core Technology Engineer* - Remotely led a small team developing the <u>Pagame</u> payment app in Android Studio from scratch. Set up the payment integration API and configured a SQL database to create the core functionality of the app.

# Brahman Capital Corp, New York, New York

June 2020 - Sept 2020

Software Project Lead - Led a solo project creating a custom stock sorting executable for the hedge fund utilizing S & P CapitalIQ's API and XpressFeed solutions. Built a standalone program with Java connected to a MySQL database.

#### Real Friend AI, New York, New York

July 2019 - Sept 2019

Web developer/Artificial Intelligence Analyst - Developed a Node.js web service concentrating on optimizing search preferences, web-scraping, admin side of the platform performing immigrations with MongoDB. Managed the AI chat bot, analyzing responses, search queries, and interactions with users. Collected and processed data for Machine Learning.

## Invictus Capital, Cape Town, South Africa

June 2018 - Aug 2018

*Software Engineer Intern* - Developed <u>Python program</u> for Blockchain watching service that simulated 10,000 randomized crypto-transactions on ethereum and bitcoin test networks, stored results to a SQL database, displayed transaction details to a web application using Flask and Docker.

## **EXPERIENCE**

#### **Technical Projects**

<u>ReFlex: Esports Training Tool</u> - Senior Design Project. Reflex training tool incorporating software and hardware feedback in the forms of eye-tracking and EMG sensors. Built with Unity, C#, React, MySQL, AWS, hardware integrated w/ Arduino.

PennOS - Fully operational OS built in C, containing a file system, CPU scheduler, and its own custom shell.

<u>PicSoul</u> - Wooden-tile art display that runs on a raspberry pi, written in C and Python, includes 14 servo motors, 2 stepper motors, and a camera with facial recognition software using OpenCV.

#### **Technical Skills**

*Programing* - C, C++, C#, Java, Javascript, Python, Unity, AWS, Hadoop, HTML, CSS, SQL, OCaml, Full-Stack Development, Node.js, Angular, React, Assembly

*Electrical* - Circuit Design, PCB Design, Power Management, Arduino, Mbed, BeagleBone, Digital Audio, Band-Pass Filters, Wifi Integration, Sensor and Motor Integration, Robotics

Mechanical - SolidWorks, Rhino 3D, Laser-Cutting, 3D-Printing, Gear Mechanisms

Languages - Fluent in Hebrew

**EXTRACURRICULARS** The Wharton Undergrad Entrepreneurship Club - VP of Product Management, **Penn ADAPT** - Member, **Zeta Beta Tau Theta Chapter** - Member, Organizer in philanthropy events, Lead Risk Manager