# **Pratush Kc**

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Website: <a href="https://pkc42.github.io">https://github.com/PKC42</a>

#### **Skills**

Programming Languages and Skills: C, C++, MIPS, Python, SQL, HTML, CSS, Git

Operating Systems: Windows 10, Linux

Software: Solidworks, Autodesk Eagle, KiCad, Multisim, Cura, MPLAB, Docker, Nginx, Wireshark,

WireGuard, Nessus Vulnerability Scanner, John the Ripper, Ncrack, Nmap, Easy-RSA

#### **Education:**

## **B.S.E** in Electrical Engineering and Computer Science, Minor in Mathematics

December 2022

University of Massachusetts Lowell, Lowell, MA

Cumulative GPA: 3.035

Computer Science Major GPA: 3.503

Relevant Coursework:

 Computing I, Computing II, Computing IV, Organization of Programming Languages, Microprocessors I, Intro to Cyber Security, Cyber Defense

# **Projects**

## 20-20-20 Project (Ongoing)

- Personal Project developed in python to help combat eye fatigue
- Utilizes OpenCV for facial detection and Tkinter for GUI
- Designed to record work habits and prompt user to look away at a far target after 20 consecutive minutes of facial detection for at least 20 seconds

## Senior Capstone Project (2021 – 2022)

- Worked in a team of 4 to fabricate a spoon specially designed for users with disabilities.
- Designed a printed circuit board using Autodesk Eagle.
- Wrote code to test individual parts.

## Image Encryption in C++ (2022)

 Utilized object-oriented programming concepts and SFML to encrypt and decrypt an image using a simulated linear feedback shift register.

#### Dynamic N-Body Simulation in C++ (2022)

 Utilized object-oriented programming concepts and SFML to simulate the movement of an N number of celestial bodies within a universe given velocity, acceleration, location, and mass

## **Work Experience**

## Kiosk Technician at Magnet Analytics, Lexington MA

(2017 - 2022)

- Replenished automated kiosks with products
- Analyzed sales to decide on product mix
- Troubleshot and repaired faulty kiosks
- Filled out purchase order forms depending on the status of the current inventory

#### Summer Engineering Intern at Novatio Engineering, Waltham MA

(Summer 2018)

- Worked with engineers to manufacture, package, and deliver sheet metal parts
- Organized and cleaned the workplace
- Tracked orders and receipts