

Kushal Kharel

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OBJECTIVE

To obtain an internship within the computer science or engineering field that will allow me to use my education and past experience in a way that is mutually beneficial to myself and my employer and allows for future growth and experience.

EDUCATION

Pennsylvania State University

Bachelor of Science Degree in **Computer Engineering** – December 2022

Minor: **Computer Science**

Relevant Coursework:

C++, Intermediate C++, Java OOP, Algorithms, Advanced Digital Circuit Design, Advanced Circuit Design, Operating Systems, Mips assembly, Computer Architecture, Signals and Systems, General Physics I, II, III, Calculus I, II, III, Differential equations, matrices.

SKILLS

Software: MATLAB, Vivado, Visual Studios, Pspice, IntelliJ, Pycharm, Eclipse

Programming Languages: C++, C, Java, Python, Mips Assembly, VHDL, JS, Shell

Hardware: Basys 3 FPGA, Arduino, Oscilloscope, Function Generator, Multimeter

Operating Systems: Windows, Linux/Unix, Mac OS

Languages: Fluent in English, Nepali, and Hindi

PROJECTS

Designed a game using ps2 keyboard, VGA, and joystick drivers for FPGA (Dec 2020)

- Coded in VHDL and Verilog using Vivado software
- Designed a custom ROM to display on VGA screen. Code was downloaded on Basys 3
- PmodJstk joystick was used as well as ps2 keyboard for dual players

Implemented Simon Game using Mips 32 assembly language (Dec 2020)

- Designed and implemented the game on Mars Simulator
- I/O pulling was used as well as bitmaps to draw on screen

Designed and implemented hospital record keeping software (Dec 2019)

- Coded in Java using OOP with proper standards
- Used for looking up patients in the system as well as appointments
- Registering new patients and tracking medications

Constructed a ticket selling and record keeping program using C++ (Nov 2018)

- Implemented the code on Visual Studios using C++
- Used polymorphism as well as OOP
- Vectors and arrays were used to hold the information

LEADERSHIP/INVOLVEMENT

- Community volunteer for tutoring Nepali elders on American history
- Contributor for Computer Science and Computer Engineering club at Penn State