Ramneek Chhatwal

ramychha@gmail.com | (864) 901- 3430 | Clemson Area | ramneekchhatwal.com

OBJECTIVE

Seeking a semester—long internship opportunity in software development or an equivalent field.

EDUCATION

Clemson University — Clemson, SC
Bachelor of Science in Computer Science (Previously Computer Engineering, B.S.) — GPA: 3.62/4.00
Mathematics Minor — Dec 2021

Related Courses (C – Completed, P – In Progress, WC – Will Be Completed by Summer 2021):

Data Structures & Algorithms - C	Computer Systems - P	Operating Systems - P
Software Development - C	Networks Programming - C	Systems Programming - C
Software Engineering – C	2-D Game Engine Design – C	Functional Programming - P

COOPERATIVE EDUCATION

Itron, Inc. (3 rotations) — West Union, SC
Networking and Product Management Engineering — Jan 2019 – Aug 2020

- Worked on integration between Amazon Alexa and an Itron meter through a Raspberry Pi using Zigbee and Bluetooth protocols
- Completed sniffer traces on Zigbee connectivity to valid devices
- Worked on API that will optimize Bluetooth and Zigbee wireless protocols to transmit metrology data
- Sent to Canada to help analyze and fix manufacturing issues on ~140,000 new meters to be deployed
- Worked on pilot program to place ~120 Zigbee routers in homes to transmit data to cloud
- Designed and prototyped hardware to allow ConEd NY to comply with new grid safety protocols in place
- Wrote technical document on ConEd NY hardware that I helped create

SKILLS

Proficient: C, C++, Java, Draw.io (UML), Agile
Intermediate: Python, Git, HTML5/CSS, MATLAB, x86 Assembly
Basic: Zigbee, Maple, LTSpice, Logisim

PROJECTS

2-D Game Engine – Currently in progress. Written in C++, this semester long project was to create a 2-D game and game engine using the SDL 2.0 library, implementing parallax, collisions, sprite animations, as well as UI.

PPM Image Manipulation – Written in C++, this semester long project was to create an image parser and manipulator for an image encoded using PPM. This program used shape coordinates given by a user to create an image. In this project, I used topics of polymorphism and abstraction.

ConnectX Game with GUI – Written in Java, this semester long project was to use software development principles to create a version of the popular game Connect4.

UNDERGRADUATE RESEARCH

Creative Inquiry
Robot Control Using MATLAB — Aug 2017 – Dec 2017

- Objective: To learn engineering and design principles by building and programming robots using Lego Mindstorms and MATLAB

Creative Inquiry — Jan 2018 - Present
Injured Military Veteran Adaptive Sport and Paralympic Soccer Program Development

- Objective 1: Provide adaptive sport activities coupled with community support and leadership services to Veterans with Disabilities and injured members of the Armed Forces
- Objective 2: Establish a Paralympic Soccer Team at Clemson and assist in the United States Paralympic Soccer Team