Haider Baloch haider.baloch@gmail.com · +1-248-946-6320 49264 Hartwick Dr., Novi MI 48374
www.linkedin.com/in/haider-baloch-4001341a5

SUMMARY

I have an excellent academic record, deep understanding of mathematical concepts, familiarity with Image Processing, backend development, and machine learning. I have strong communication, analytical and problem-solving skills.

EMPLOYEMENT

Siemens PLM **May 2022 – August 2022**

Software Development Engineer Intern

- Developed algorithms on the backend in order to solve problems with Siemens' NX software using C++
- Developed algorithms on the backend in order to enhance the capabilities of software using C++
- Created automated unit tests for Siemens' NX software in order to integrate new features into the codebase

EDUCATION

University of Michigan, College of Engineering, Ann Arbor **August 2020 - May 2024**

BSE in Computer Science **GPA: 3.829**

- **Awards**
  - Recipient National Merit Siemens Scholarship and Michigan Regents Merit Scholarship
  - University Honors: Fall 2020, Fall 2021, Winter 2022
  - Dean's List: Fall 2021, Winter 2022
  - Angell Scholar: Two semesters
- **Relevant Courses**
  - Introduction to Programming (ENGR 101), Introduction to Data Structures (EECS 280), Data Structures and Algorithms (EECS 281), Discrete Mathematics (EECS 203), Probability and Statistics for Engineers (IOE 265), Linear Algebra (MATH 214), Introduction to Logic Design (EECS 270), Introduction to Computer Organization (EECS 370), Foundations of Computer Science (EECS 376), Special Topics: Internet Foundations (EECS 498), Introduction to Machine Learning (EECS 445), Web Systems (EECS 485), Programming Languages (EECS 490)

Schoolcraft College, Livonia, Michigan **August 2019 - May 2020**

- Took advanced math courses at a local community college through High School **GPA: 3.9**
- Relevant Courses: Calculus with Analytical Geometry 3, Differential Equations

SKILLS

Programming Languages/Technical

- C/C++, MATLAB, Java, R, Verilog, Python, HTML
- Visual Studio, VS Code
- Can Code FPGAs

Interests

- Algorithm Development
- Machine Learning
- Image Processing

PROJECTS

EECS 280

- Developed a program that based on training data categorizes posts on a forum called Piazza using a naive Bayes classifier
- Developed a program for content-aware image resizing using seam carving approach
- Developed a program that used linked lists to create an Office Hours queue

EECS 281

- Used breadth first and depth first searches to efficiently traverse a route from point A to point B
- Used priority queues to simulate a Zombie survival game
- Used hashmaps to keep track of, search through and sort logs
- Used the branch and bound method to efficiently solve a variation of the Traveling Salesman Problem

CLUBS

Michigan Mars Rover Club - Member of Perception Sub Team