Abenezer Wudenhe

awudenh@ncsu.edu
3320 Walnut Creek Parkway
Apartment O, Raleigh, NC 27606
(240) 418-4302 (mobile)

EDUCATION

North Carolina State University (NC State)
PhD in Computer Science
GPA: 4.0 — Expected: May 2022

University of Maryland, Baltimore County (UMBC)
BS in Computer Engineering – VLSI & Comp. Security Track
GPA: 3.504 — May 2018

TECHNICAL SKILLS

Languages:	**C, C++**, python, html, MPI, php, Arduino IDE, CUDA, OpenMPI
Operating Systems:	Windows, Linux(Debian, Fedora, Ubuntu, Raspian OS)
Software Tools:	Xilinx Design Tool, MATLAB, Cadence's Allegro Design Entry CIS, Atmel Studio, Git, Virtual Box, LaTex, EAGLE, Autodesk, X11System

RELEVELNT PROJECTS

VLSI Cache Design (Academic)
- Design, implement, and simulate in VHDL for a 32 byte cache
- Design the layout for the cache and ensure no design errors occur

Password Keeper Kernel Module(Academic)
- Write a Linux kernel module that creates and stores user passwords
- Implement module into a miscellaneous device compiled against 4.9 Linux source tree

Magic Smart Mirror (Extracurricular)
- Design and construct 3D printed modules for two way infinity mirror with a GUI
- Implement GUI using Google Calendar API, Raspberry pi, python, and Java

Arduino Workshop (Extracurricular)
- Design introductory course on microcontrollers and embedded systems
- Instruct students on how to utilize PWM, ADC, Servos, and analyze circuits

RESEARCH EXPERIENCE/EMPLOYMENT

University of Michigan Lab 4PROGRESS REU — 2017 May - Aug 2017
- Constructed a cluster computing network
- GPU accelerated image rendering

Electroencephalograph (EEG) Study on Image Formation — 2016 June - Aug 2016
- Organized data management from experiments
- Programed Matlab code for 3D graph plotting and analysis

High Performance Computing REU — 2015 May - Aug 2015
- Conducted performance test on "Maya" server cluster
- Showed results and recommendations to speed up servers

PUBLICATION

A. Wudenhe, F. S. Choa, Q. Meng, Three-dimensional EEG signal tracking for reproducible brain activity monitoring. IEEE Xplore Digital Library 2017. 7846869.

Abenezer Wudenhe

awudenh@ncsu.edu
3320 Walnut Creek Parkway
Apartment O, Raleigh, NC 27606
(240) 418-4302 (mobile)