

# KIANA VANG

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## **EDUCATION**

**Bachelor of Computer Engineering, Spring 2021**  
University of Minnesota - Twin Cities, Minneapolis, MN

Major: Computer Engineering  
Cumulative GPA: 3.5/4.0

## **RELEVANT COURSEWORK**

Microcontrollers, Computer Architecture & Machine Organization, Artificial Intelligence, Machine Learning

## **KEY PROJECTS**

### • **Spam Filter**

Programmed and tested models utilizing state-of-the-art machine learning methods (Naïve Bayes and Deep Learning) to classify email messages

### • **Pronunciation Tool for Learning Tonal Languages**

Worked with senior design team to develop a pronunciation tool (interactive GUI) for learning tonal languages, such as Chinese Mandarin. Audio samples were used as input to train convolution neural network (CNN) model, which was then used to predict and correct users' tone.

• For more information and/or to see more projects, visit my GitHub portfolio at [github.com/kianavang](https://github.com/kianavang)

## **RELEVANT EXPERIENCE**

### **Microcontrollers Peer Teaching Assistant**

August 2020 – December 2020

University of Minnesota, Twin Cities, Minneapolis, MN

- Knowledgeable in basic computer organization, opcodes, assembly language programming, logical operations and bit manipulation in C, stack structure, timers, parallel/serial input/output, buffers, input pulse-width and period measurements, PWM output, interrupts and multi-tasking, using special-purpose features such as A/D converters
- Attended labs alongside students to answer questions and explain or clarify teaching topics
- Proactively observed and assisted students with common mistakes regarding their hardware and programs
- Held weekly office hours and on a need(s) basis to help students with homework, exams, and lab assignments

### **Epidemiology Researcher at Tiny Earth Research Project**

June 2020 – August 2020

NorthStar STEM Alliance, Minneapolis, MN

- Looked the incidence, distribution, control of infectious diseases as well as other factors relating to morbidity and mortality
- Designed my own epidemiological study and presented at annual NorthStar STEM's Launch and Kick-off Day
- Conducted research on correlation between climate variables and COVID-19 cases in Twin Cities, MN
- Collected and analyzed data utilizing Python programming language

## **SKILLS AND INTERESTS**

### **Interests**

- Integration of embedded systems and design, artificial intelligence, and machine learning

### **Technical Skills**

- Skilled in programming (C/C++, Python, CUDA, Microchip Assembly, MATLAB)
- Proficient with Microsoft Office products including Microsoft Project
- Experienced using Altium, GitHub, Visual Studio, Atom, Jupyter Notebook, Spyder, LaTeX, Google Collab Notebooks
- Competent in using PC, MacOS, and Linux operating systems/environment

### **Languages**

- Able to read, write, and speak in Hmong (native), English (native), Japanese (conversational), and Thai (conversational)