Fast Track Biography

Thomas Chu, Class of 2025

About Me

I'm Thomas Chu, a student studying electrical engineering at UCLA. I'm from Piedmont, California, where I've lived my entire life.

Currently, I'm involved in IEEE micromouse, a project where teams of students design and program a 2-wheeled robot to navigate a maze. I'm also a member of Bruinracing, where I'm part of the subteam responsible for designing electrical components to maximize a gas vehicle's mileage.

The reason I chose to study EE is because I want to go into circuit design, especially for analog and RF. During high school, my favorite subject was electrical physics, which I'd consistently look forward to. To pursue this passion outside of school, I created a printed circuit board that filters output from an analog gyroscope using an RC low pass filter. The gyroscope worked, but had 1% drift because the current draw from the microcontroller attached to it was too high. I now know that I should've attached an OP AMP buffer to the analog gyroscope's output. On top of physics, I found that I loved engineering while participating in FIRST robotics, where I served as a programmer for three years. I implemented a Pure Pursuit system that allowed the robot to travel a curved path approximately, then later improved on it by programming a Ramsete algorithm for the robot to follow the path exactly with velocity and acceleration control. We won the Oregon State Championships my senior year.

In my free time, I enjoy reading fantasy fiction novels and watching documentaries on Youtube.

Future Goals

My goal at UCLA is to get involved in research, student organizations such as IEEE, and personal projects. I'm thinking of creating a wireless charging attachment that can go on the back of my phone so I don't break my charging port with wear and tear, or a circuit board that uses an electric shock to wake somebody up in the morning.

Professionally, I aspire to go to grad school and then work at a company that operates in the areas of computer hardware or circuit design. I still haven't decided whether I want to pursue a PhD or just a master's, but I know that UCLA's engineering department will prepare me for both.