Tenzin Norphel

tnorphel@berkeley.edu (510) 942-1090 github.com/Tenz1999 linkedin.com/in/tenzin-norphel

Education

University of California, Berkeley *Expected December 2025*
BS in Electrical Engineering and Computer Science

- **Coursework:** Machine Structures, Discrete Math and Probability, Integrated-Circuit Devices, Introduction to Robotics, Signal and Systems, Microfabrication, Control system and feedback, Robot Manipulation and Vision, and Artificial Intelligence

Skills

CAD(Computer Aided Design), MATLAB, ROS(Robot Operating System), Python, Sentaurus(Synopsys), C++, C, Java, Git, RISC-V

Projects

Hardware Designer *Berkeley, CA*
N-MOSFET Design Project *Oct 2024*

- Utilized semiconductor device simulation software (Synopsys' Sentaurus package) to design an N-channel Si MOSFET with gate length, LG = 25 nm (relevant for the "20 nm generation" of CMOS technology).
- Met specified performance requirements within constraints using Synopsys (Sentauraus Package)

Hardware Designer *Berkeley, CA*
TurtleBot Mazer Solver *Oct 2024*

- Given an arbitrary maze, Turtlebot 2.0 has the capability to traverse through the maze, scan the maze for its most optimal path from a starting point S, and save its layout into memory using ROS (Robotic Operating System) in Python.

CPU Designer *Berkeley, CA*
CS61CPU *March 2024*

- Designed and implemented a fully functional RISC-V CPU with a data path in Logisim.
- Developed a processor capable of executing RISC-V machine code, implementing instruction fetch, decode, execute, memory access, and write-back stages.
- Integrated pipelining techniques to improve performance and increase throughput.
- Built the CPU from basic logic gates and registers, demonstrating a deep understanding of computer architecture.

Bee-Like Coders Hackathon *Remote*
Backend Developer *March 2022*

- Created Study Tracker has two main features: the study timer and the web activity monitor.
- Built a study timer that notifies the user.
- Designed a study tracker for students in need of better study habits.

Work Experience

Group Facilitator *Berkeley, CA*
T-Prep(Transfer-Preparation) *July 2023*

- Participated in a 24-hour sprint where students collaborated in teams to find solutions to global issues.
- Served as a facilitator and kept the team.

Project Intern *Remote*
NASA - MCA(Mission Concept Academy) *May 2021*

- Used Siemen CAD tools to design a Rover and RIMFAX payload deployment system for lunar landing
- Planned how to descent maneuver and vehicle design specific for the moon's environment with low gravitational force and its surface.