

# Nicholas Kading

## Recent Graduate

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## Summary

What drives me is not just a passion to learn how things work, but a drive to find solutions that can transform lives and industries. When I was young, as a hobby, I found programming and system administration interesting, and learned both on my own time as a hobby. With a Bachelors degree in Electrical Engineering from UCSD, I have developed a deep understanding of hardware and software principles, including VLSI chip design, VHDL, discrete circuits, analog and digital signal processing, computer system design, and microwaves. It is through this intersection of hardware and software that I excel at solving complex problems in a multifaceted and interdisciplinary environment. My time in university has reinforced my ability rapidly adapt to new tools, provide effective communication, time management, and an excellent work ethic.

## Educational Background

**B.S. Electrical Engineering**  
San Diego, CA (ABET accredited)

**University of California, San Diego**  
September 2021 – December 2024

**Concentration:** Electronic Circuits and Systems & Computer System Design

- 3.55 GPA, 249 Units
- All classes taken for a letter grade
- 9 APs, 1260 SAT
- 4.59 WGPA (High School)

## Technical Skills

**Programming:** Python, C++, JavaScript/HTML/CSS, Assembly, Rust, SQL

**Engineering Tools:** Cadence, AutoCAD, MATLAB, Intel Quartus, LTSpice, OrCAD, VSCode

**Productivity Software:** Microsoft Word, PowerPoint, Excel, Outlook, Google Workspace, Adobe Acrobat

## Soft Skills

Fast learner, great teamwork, high adaptability, great communication skills, excellent time management, detail oriented, leadership and initiative, excellent problem-solving skills, people skills.

## Projects

- I programmed an FPGA to perform sha256 hashing on hardware. I designed it in SystemVerilog in Intel Quartus Prime and ModelSIM
- I developed a web app prototype focused on facilitating seamless book borrowing experiences, integrating user authentication and database management via SQL and python to ensure a reliable and secure platform
- I designed a quick sort algorithm entirely in Assembly with memory access and function calls
- As part of a team, I designed and fabricated a wireless remote prototype that wirelessly transmits keypresses to a computer. Utilizing 3D modeling software, I optimized device design and component layout. Assembling components required precision soldering techniques. I developed a custom JavaScript backend, leveraging an Arduino microcontroller to transmit signals and enable efficient digital control.
- I developed a two-stage amplifier circuit to meet specifications by modifying the sizing of a predetermined layout with 31 MOS transistors and a few passive components.

## Professional Experience

### DevOps Engineering Intern

Planview

June 2022 – August 2022

As a DevOps intern with Planview's LeanKit solution, I successfully managed and improved on cloud-run scripts by completing three months of planned work in just 45 days. I collaborated with the team to design and deploy a Slack bot. I migrated their existing code from JavaScript to Python, I combined scripts to create more predictable behavior, and managed permissions to ensure security compliance. The bot ran within the AWS suite, integrating with multiple APIs to facilitate real-time project status updates to team members. To ensure project deadlines were being met, I attended daily stand-up meetings with the DevOps team to discuss plans for the day. The projects I undertook spanned multiple technologies, including

• Slack API

• AWS Lambda

• Terraform

• LeanKit

• Python

• JavaScript

“We threw a lot of new technologies at him right from the beginning, and he jumped right in. He was able to knock out 3 months of planned work in 45 days...He displayed strong ambition to work independently, and producing well written and easy-to-follow documentation” – Chris Mobley (Team Manager)

## Courtesy Clerk

Vons - Albertsons  
February 2025 – April 2025

As a Courtesy Clerk with the Albertsons Company, I have developed a unique blend of skills that enable me to deliver excellent customer service in a fast-paced retail environment. I engage with customers on an ongoing basis, answering questions and addressing concerns that a customer may have. In this role, I effectively multitask often. I transition between tasks quickly and effectively, performing such jobs as:

- helping customers
- bagging
- sweeping floors
- returning carts
- opening locked cabinets
- managing self-checkout
- returning merchandise
- custodial duties

Through my experience, I have honed time management skills, multitasking, and strong interpersonal skills, including active listening and conflict resolution, allowing me to drive excellent customer service.

## Organizations

Member - Institute of Electrical and Electronics Engineers 2025-Present

As a member of the IEEE, I engage with a continuous learning path of self-improvement, I network with fellow professionals, participate in public events, and keep up to date with breakthroughs in the electrical engineering industry.

Volunteer – Epilepsy Foundation 2015-Present

As a volunteer of the Epilepsy Foundation, I participated in a once-yearly event called Sharon's Ride, Run, Walk. The event involved hundreds of people going outside for a day, riding, running, or walking a loop around Mission Bay, San Diego. The event helps promote Epilepsy research and safety and health in our everyday lives. Because of my childhood epilepsy, this organization meant something special to me.

Participant - FIRST Robotics

August 2018 - June 2021

As a participant in the FIRST Robotics Competition, I worked with the team to develop a robot that can complete a task quickly and efficiently while following a set of constraints. My role in the project was primarily as the lead programmer on the team. I engaged regularly with our team manager to develop new algorithms, provide code fixes, and communicate needs with hardware specialists.

## Languages

- English
- Italian