

Uday Kalra

Computer Science

University of California San Diego

ukalra@ucsd.edu

Mobile: 925-858-5302

Home: Dublin, CA 94568

Objective

Through pursuit and refinement of engineering skills, I aim to apply a diligent, motivated mindset and innovate in the fields of computer software.

Education

Currently pursuing a **BS degree in Computer Science, UC San Diego** **Expected Graduation: June 2023**

University course work by Fall 2020: Theory of Computation, Practical Statistics and Probability, Advanced Data Structures, Algorithm Mathematics, Systems Programming, Software Tools and Techniques, Software Tools and Techniques, Data Structures, Linear Algebra, Discrete Math, Intro to CS and Object-Oriented Programming, Vector Calculus

Pre University Relevant Subjects: AP Computer Science Applications(5/5), AP Calculus AB(5/5), AP Calculus BC(5/5), AP Physics C: Mechanics(5/5) and AP Spanish(5/5), SAT Math 2(800/800) & SAT Chemistry(800/800)

Work/Leadership Experience

Google / STEP Engineering Intern

June 2020 - September 2020, Virtual Internship

- Developed a cloud-based web application using a Java backend to generate text based on a photo input through integration of Google Cloud App Engine, Compute Engine, and Cloud Run.
- Authored design documents, reviewed code, and organized team timelines to ensure thorough development.
- Deployed an additional full-stack internal website using HTML, CSS, JS, Java and Google AppEngine to display personal updates as well as handle incoming comments.

IRON Systems / Intern

June 2017 - August 2017, Fremont, CA

- Implemented a digital receptionist system to streamline employee contact and visitor identification.
- Shadowed distribution of server hardware to engineering firms throughout the United States.

VEX Robotics Team 5327 / Captain/Lead Programmer

August 2016 - April 2018

- Served as lead programmer and captain for a VEX Robotics competition team, leading a team of 10 students.
- Utilized control loops and input schemes to handle both automation and user control competitively.
- Qualified for and competed in the World Championships twice in a row, a selection of 500 of 11,500 teams.

Fallon Engineering Labs / Mentor

November 2015 - May 2016, Dublin, CA

- Guided over 30 children yearlong through three projects. All students pursued STEM pathways in high school.
- Tutored middle school students in the basics of engineering through digital electronics and programming.

Skills

- **Advanced in Java, Python, HTML, and CSS.**
- **Proficient in C++, PHP, JS, C#, GCloud and AWS.**
- Versed in Unix/Linux environments.
- **Android** Development experience.
- Machine Learning and Neural Training with **Tensorflow.**
- Versed in **LaTeX.**
- Digital electronics and **Arduino/Raspberry Pi** implementation knowledge.
- **Computer Hardware** assembly understanding.
- **Competitive Robotics** assembly and programming.
- Video/Image editing with Resolve/Photoshop.

Academic Highlights and Awards

- **University Provost's Honors** since Fall 2019.
- Won **first place** at Alameda County Science and Engineering Fair for DoseMaster, an automated pill dispenser system
- **Founding President** of Dublin High School Programming and Technology Enthusiast Clubs. Each starting with approximately 50 members and growing to 100 members.
- Placed 3rd regionally in DECA Principles of Marketing 2015
- Member of **National Honors Society** and Lifetime Member of the **California Scholarship Federation.**
- **California State Seal of Biliiteracy** awarded for Spanish
- **National AP Scholar** and **AP Scholar with Distinction** Awards as of July 2018
- **AP+PLTW Engineering Award** in November 2018
- **A+** in ATDP UC Berkeley Java Programming
- **Founder** and **mentor** for Spectre Robotics, a community oriented Robotics non-profit organization, which guided 12 middle school students through competition preparation
- **Advanced Scholar Diploma** and **President's Award for Educational Excellence** recipient