

Nicole Martindale

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EDUCATION

UC SAN DIEGO

BS IN COMP. SCIENCE

Expected June 2021 | San Diego, CA

Provost Honors

Eleanor Roosevelt College

GPA: 3.66

LINKS

Github:// [nikiollie](#)

LinkedIn:// [nicole-martindale](#)

Portfolio:// [nicole-martindale](#)

Website: <https://nikiollie.github.io/>

COURSEWORK

- Data Structures & Obj-Ori Design (Java)
- Computer Organization & Sysms. Prog. (Assembly and C)
- Mathematics for Algorithms & Systems
- Engin. Comp. Using MATLAB
- Linear Algebra
- Discrete Mathematics

SKILLS

PROGRAMMING

Python • Java • Assembly • C

C++ • HTML • CSS • LaTeX

MATLAB • Mathematica

SOFTWARE TOOLS

Vim • Unix • Git • GDB

Eclipse • Atom • XCode

Altium • Autodesk Fusion 360

HARDWARE

Raspberry Pi3 • Arduino • Machining

Particle Electron/ E-series

AWARDS

- 2017 SWE San Diego Scholarship Award
- National Center for Women and IT Award - 2017 San Diego Winner

CLUBS

- Women in Computing: Member, Competed in Beginner's Coding Competition
- Society of Women Engineers: Mentor for Anita Borg Leadership and Engagement Program (ABLE)

EXPERIENCE

UCSD CSE DEPARTMENT | CSE TUTOR

Sep 2018 - Present | UCSD CSE Dept

- Tutor for Professor Gary Gillespie's CSE 15L (IDEs, build tools, Shell Scripting)
- Grade homework and exams, hold office hours and staff labs to help students understand the course and teach debugging skills

EARLY RESEARCH SCHOLARS PROGRAM | RESEARCHER

Sep 2018 - Present | UCSD CSE Dept

- Characterize metagenomic sequence data through the development of generalized adversarial neural networks using Python and TensorFlow.
- Evaluate the performance of these networks using real and mock community metagenomic data, in comparison to existing standard tools in the field.

QUALCOMM INST. CALIT2 PROTOTYPING FACILITY | LAB INTERN

Jan 2018 - Present | UCSD

- Design, build, and program research projects and prototype devices for professors, organizations, and the Prototyping Lab.
- Work with software and electrical devices such as Arduino, Particle Electron, transistors, sensors (Ultrasound, Photoresistor, Temperature, etc).

SUMMER PROGRAM FOR INCOMING STUDENTS | MENTOR

Aug 2018 - Sep 2018 | UCSD CSE Dept

- Introduced 50 incoming CS students to college-level Python and concepts such as abstraction, computation, algorithm design, image processing, computer vision, cryptography, and data mining.

GIRLS WHO CODE @ AUTODESK | TEACHING ASSISTANT

June 2018 - Aug 2018 | San Francisco, CA

- Instructed 20 girls during a 7-week intensive summer immersion program in Scratch, Python, C++/Arduino, Javascript and markup languages including HTML and CSS for non-profit organization, Girls Who Code

PROJECTS

UCSD HACKXX | SHOPPINGCENTER@UCSD

April 2018

- Built an iOS app called ShoppingCenter@UCSD which acts as an online marketplace allowing students to buy and sell each other's items
- Used Swift and XCode to compete in the 24 hour hackathon with two other team members.

UCSD H.A.R.D. HACKS | NAMEBUZZER

Jan 2018

- Programmed a Qualcomm DragonBoard 410c with Arduino, Audio Mezzanine Board and motor
- Used the Python Snowboy API for voice recognition, the motor would vibrate when the keyword was heard. Can help the hearing-impaired community.

UCSD CSE SPIS | GREETER ROBOT

Summer 2017

- Built a "greeter robot" using Python, Raspberry Pi3, servos, ultrasound sensor
- Programmed to recognize reflective tape & autonomously follow it, then relay a previously recorded message and "wave" using foam hand connected to servo