

Nick Mak

COMPUTER SCIENCE
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EDUCATION

UC SAN DIEGO

B.S. IN COMPUTER SCIENCE
December 2021 | La Jolla, CA

R.A. SCHOOL OF THE ARTS

WORLD MUSIC AND DANCE
Grad. May 2016 | San Francisco, CA

LINKS

Website:// nmakucsd.github.io
LinkedIn:// nick-l-mak
GitHub:// nmakucsd
FIRST Robotics:// team5700.org

COURSEWORK

Computer Science in Java and C/C++
Computer Architecture
MIPS Assembly Language
Verilog
Data Structures and Algorithms
GitHub
Unix/Linux Operations

SKILLS

LEADERSHIP

Public Speaking • Agile Development
Community Service • Teaching (3+ years)
Sponsorship Outreach •

COMPUTER SCIENCE

Java • C/C++ • HTML • CSS • Unix/Linux
Javascript • Robotics Programming
MIPS • Verilog • Arduino • \LaTeX

ENGINEERING

MACHINING

CNC | Computer Numerical Control
Mill • Lathe • Routing
Welding • Metalworking

SOFTWARE

3D Printing
CAD | Computer Aided Design

LEADERSHIP ROLES

Associated Student Body
IEEE UCSD | Project Lead
Triton XR | Project Manager
KOTX UCSD | Media Producer
Robolink | Robotics Instructor
Hapkido USA | Instructor

EXPERIENCE

UCSD IEEE ROBOCUP ANNUAL PROJECT | PROJECT LEAD

October 2019 - Present | UCSD

- Manage team of seven individual to build, program, and design one of six robots to play in international Robocup Robotics Competition.
- Publish paper on robot specifications and documentation.
- Design robot subsystems with Computer Aided Design.
- Program robot using DJI Development Board

ROBOLINK | ROBOTICS INSTRUCTOR

November 2019 - Present | San Diego

- Teach kids robotics programming and engineering concepts.
- Coach and mentor kids in competition for VEX IQ.
- Program robot using VEX IQ and Arduino kits.

TAYLOR COLLABORATIONS LAB | ENGINEERING INTERN

May 2017 – July 2017 | San Francisco, CA

- Developed presentation on arthroscopic tool designs used in minimal-invasive arthroscopy.
- Learned and used Computer-Aid Design for part manufacturing.
- Learned and applied G-code (programming language) for CNC machining.

FIRST ROBOTICS TEAM | MENTOR, FOUNDER, PRESIDENT

August 2014 – December 2017 | San Francisco, CA

- Founded team through school administration, raised \$10,000 to kickstart.
- Managed, lead, and taught a team of 40+ high school students to construct 120lb robots to compete annually.
- Studied and developed skills in Machine Fabrication, Computer Aided Design, Java Programming, Computer Vision, Electronics Engineering, Business Development, Public Relations, Web Developing, Videography, Accounting, Project Management, and Team Management.

PROJECTS

FIRST ROBOTS | SOFTWARE DEVELOPER, MECHANICAL ENGINEER

October 2014 – December 2017 | San Francisco, CA

Worked with FRC Team 5700 | SOTA Cyberdragons to manufacture and program 120lb robots, annually to compete in the FIRST Robotics Competition. Concepts like, rapid prototyping, version control, hardware programming were used frequently.

ANIMATRONIC WIRELESS ARM | PERSONAL PROJECT

June 2016 - September 2016 | San Francisco, CA

Created robotic hand to mimic user's hand positions. The project uses an Arduino + breakout board along with flex sensors on a glove to send wireless signals to a servo actuated arm.

AWARDS

FIRST ROBOTICS COMPETITION

2018	FRC San Francisco Regional	2018 Excellence in Engineering Award
2017	FRC San Francisco Regional	2017 Imagery Award iho. Jack Kamen
2016	Calgames 2016	2016 Highest-Seeded Rookie Award