Yixuan Lu

Aspiring programmer, Del Norte Sophomore

GPA: Unweighted:4.0/Weighted:4.28

**LEADERSHIP**

**CyberAegis Team, Lead and Linux Specialist**

JULY 2021-PRESENT

* Del Norte’s CyberPatriot Team
  + Nationwide competition for cyber-security and real-time cyber threats.
  + 4 years of experience, 2 years of leadership.
* Design Training materials for team practice.
  + Presentation and lessons on Linux concepts
  + Organization of club meetings and lessons
  + Construct training images (virtual machines) for team members to practice competition skills
  + Proctoring club tryouts and other events.

**Project Art of Learning, VP of Project Operations**

MAY 2022-PRESENT

* A 501(c)(3) non-profit organization aimed to provide one-to-one tutoring sessions in math and computer science for low-income, immigrant, and refugee students.
  + Maintain social media platform
  + Organize Club Events
  + Assist club directors with curriculum and activities.

**Del Norte Physics Tutoring Club, Secretary**

SEPT 2021-PRESENT

* School club designed to assist high school students in physics 1-2, AP Physics C: Mechanics, and AP Physics C: Electricity & Magnetism.
  + Keeps record of club activities.
  + Maintaining club face and advertisement.

# EXPERIENCE

## Internship, Franklin Research Internship Program

### MAY 2021 - JULY 2021

* Research Program dedicated to various research topics under a mentor.
  + Developed statistics and data collection skills
  + Researched the efficacy of various recommendation algorithms.
  + Studied the basic topics of machine learning.
    - Regression
    - Classification

## Volunteer, Education for Nepal, Math tutor

### OCTOBER 2020 - PRESENT

* Cooperated with students from Nepal
* Taught students valuable skills in the field of mathematics
  + Covered a broad range of topics including   
    Algebra, trigonometry, and pre-calculus concepts
* Created tutoring videos for students

## Volunteer, Cyber Education Initiative, Tutor

### JULY 2020 - SEPT 2020

* Club’s purpose was to inform young children about the importance   
  of safety in the cyberspace and how to protect oneself from   
  cyberattacks
* Topics taught:
  + Basics of the Linux OS and terminal.
  + Security countermeasures on the windows OS
  + Computer Networking and how network devices communicate

## Volunteer, 3D-printing club

### NOVEMBER 2020 - JANUARY 2021

* Club’s purpose is to utilize 3D printing technology, to produce safe

and usable shields for medical workers during Covid-19.

* Created around 40 masks

# SKILLSET

* **Programming Experience:** 2-3 years of experience in Python. Currently studying C/C++ language, algorithms, and data structures.
* **Cybersecurity principles:** Experience in white-hat hacking, red vs blue scenarios, familiarity with Linux and windows forensics tools.

**Linux Environment:** Familiar with navigating the terminal and the Linux file system.

**Git:** Aware of the basic functions of the software control tool for group collaboration.

* **Computer Networking:** Basic knowledge of networking devices, OSI model, and experience with Cisco packet tracer. Planning for CCNA examination.
* **Computer Architecture:** Started learning the x86 and ARM architectures.
* **Mathematics**: Familiar with Trigonometry, Algebra, and Calculus concepts.

# AWARDS

**CyberPatriot**

**2nd Place nationally**

Middle School division (**12th season**)

**8th Place nationally**

High School (Open) Division **(13th season)**

**4th Place nationally**

High School (Open) Division

**(14th season)**

**Socal CyberCup**

**1st Place** Junior Varsity Division (**2019-2020**)

**California Cyber Innovation Challenge**

**9th Place** High School Difficult Division, led the team as Team Captain

**President’s Volunteer Service Award**

**Gold Award -** Teens, 100+ hours of volunteer work

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**INTERESTS**

* In my free time, I enjoy learning programming concepts as I find them interesting and intriguing. I’ve discovered that by treating difficult or daunting problems as fun logic puzzles instead, I could enjoy my time researching these topics while improving my competency as a programmer.
* Recently I’ve developed a growing interest in the Machine Learning field. I’m most proficient with traditional programming, but the growth in the popularity of Machine Learning opened my eyes to its future potential. Although I still view myself as a beginner in the field, I hope to improve over time and develop the necessary skills for my own projects.