# Phuc (Jack) Le

### Junior at Cypress Woods High School

Contact

**Address** 

**Email** 

18114 Grotto Point Dr. Cypress, TX 77429

Phone

Website

jakl3.github.io

713-449-5966

GitHub

LinkedIn

jackle61333@gmail.com

github.com/jakl3

linkedin.com/in/jakl3

#### Interests

Computer Science | Machine Learning | Computational Biology | Neuroscience | Artificial Intelligence

# Education

Cypress Woods High School — Cypress, TX

(Aug 2018 - Jun 2022)

- GPA: 6.800/6.000Class Rank: 12/768
- Coursework:
  - > 9th Geometry Honors, Health/PACE, Human Geography AP (4), English I Honors, Spanish III Honors, Computer Science I Honors, Biology I Honors
  - > 10th Algebra II Honors, World History AP (5), Physics I AP (5), Chemistry I Honors, English II Honors, Computer Science AP A (5), Robotics I
  - ➤ 11th English III AP, US History AP, Pre-Calculus Honors, Statistics AP, Computer Science III Honors, Chemistry AP/Dual, Physics II AP/Dual
- Standardized Testing:
  - > SAT: March 2021 1600 (800 Math, 800 Reading)
  - > **PSAT**: January 2021 **1480** (760 Math, 720 Reading)

## Skills

- Software:
  - Proficient: Java, Python
  - **Familiar:** JavaScript, C++, C#, HTML/CSS, Git
- Languages: Fluent in English, Conversational proficiency in Vietnamese
- Experience: Microsoft Office Suite, Basic knowledge of Machine Learning

# Honors and Awards

# Honors and • UIL Computer Science

(2018 - 2021)

Won and placed in several local competitive programming competitions, hosted by both local high schools and the University Interscholastic League of Texas.

#### • United States of America Computing Olympiad

(2021)

Online competitive programming competitions with global contests held every month in the Spring. I
am currently in the Silver division.

#### • HP Code Wars and Lockheed CodeQuest

(2020 - 2021)

- Annual competitive programming competitions, hosted by HP Enterprises and Lockheed Martin. I have placed in the top 10 of over 250 teams in CodeWars, and in the top 5 at CodeQuest.

#### • AP Scholar with Honor

(2020)

- Awarded to students who scored a three or higher on four or more exams. I scored a five on three exams (Physics I, World History, CS), and a four on one (Human Geography).

#### Distinguished Honor Roll

(2016 - 2020)

- Awarded to students who achieved all A's. I have received this award every year since I first came to the United States.

#### Most Outstanding Achievement in Various Subjects

(2019 - 2021)

- Awards given for placing at the top of the class in a given subject. I received this award for Computer Science Honors, Chemistry AP/Dual, Physics II AP/Dual, and English III AP.

#### **Activities**

#### • Computer Science Club — Member

(2018 - Present)

- In the club, I learn data algorithms and strategies from my seniors, and regularly compete in various regional competitions, as well as in the statewide UIL meets. I also occasionally help teach newer members concepts that I have learned. I was an alternate for the UIL-winning state team this year.

#### • Science Olympiad Club — Member

(2019 - Present)

- I studied various topics relating to Science Olympiad events and used what I learned to compete at regional competitions. At these competitions, I mainly focused on events relating to biology and Computer Science.

#### • Interact Club — Event Coordinator

(2018 - Present)

 I volunteered at service projects in the local community. As event coordinator, I was responsible for finding these projects and events, communicating to the volunteer coordinators, and sharing the events with our members. Notable events that I coordinated and/or helped with include the Houston Food Bank, the Houston Lights Festival, Cypress Assistance Ministries, the Interact District Conference, Lone Star Cy-Fair Library Assistance, and the annual UIL competitions.

#### • Math Club — Member

(2019 - Present)

 I learned new math concepts and applied them to competitive mathematics, including UIL and the AMC.

#### • **Cinema Club** — Co-founder, Treasurer

(2020 - Present)

 We watch movies and analyze the technical aspects of filmmaking, such as the effect of Computer-generated Imagery (CGI), lighting, and more. As club treasurer, I was in charge of the club's financial account and expenditures.

#### • **Kattis** — Participant

(2019 - Present)

- Kattis is an online judging platform with a large database of competitive programming problems and open-sourced contests held frequently. I am currently in the top 30 in the state of Texas.

# **Projects**

#### Cube Racer

(May 2021)

- Using C# and Unity, I created a video game. Players control a cube, which is automatically moving down an infinite pathway, moving it side to side in order to dodge obstacles. I implemented random obstacle generation, infinite pathway creation, collision, UI, and more.
- For more information, check here: https://jakl3.github.io/games/cuberacer/cuberacer.html

#### • Guitar Hero Project

(Jan 2021)

- Using Java, I recreated the popular *Guitar Hero* game, capable of playing any song from <u>here</u>. Players can either play notes manually through keyboard input, or allow the computer to play songs automatically. For graphics and audio, I used the Standard Libraries from Princeton University.
- For more information, check here: <a href="https://github.com/Jakl3/Guitar-Hero-Project">https://github.com/Jakl3/Guitar-Hero-Project</a>

#### Tag Cloud Project

(Nov 2020)

- Using Java, my partner and I created a program that scrapes the HTML of any website given and generates a word cloud based on its contents. The sizing of each word is determined by the tag(s) that the word is enclosed by, as well as the number of times it appears on the website. The word cloud is optimized to display the largest words in the center, and ensure that no words overlap each other when it is displayed.
- For more information, check here: <a href="https://github.com/Jakl3/Tag-Cloud-Proiect">https://github.com/Jakl3/Tag-Cloud-Proiect</a>

#### References

#### Stacey Armstrong

**Vy Tan Hoang Van**Principal and Teacher

Computer Science Teacher Cypress Woods High School

Van Houston Academy (vanhoustonacademy@gmail.com)

(stacev.armstrong@cfisd.net)