## Luke Collins {

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## Relevant Experience : {

Data Science Institute Summer Lab, University of Chicago (2022): 1 of 12 high school students (along with 48 undergrad/grads), 10-week paid full-time research program

Research Assistant to PhD Candidate, UCLA (2019): Used 3D segmenting program to train convulutional neural networks on dental xrays with aim toward applying for patent

Research included in published paper - X2Teeth: 3D Teeth Reconstruction from a Single Panoramic Radiograph, Medical Image Computing & Computer Assisted Intervention, 23rd International Conference, Lima, Peru, Oct. 2020

Institute for Astronomy, University of Hawaii (Summers 2019/ 2020) : Created Python program to
assist astronomers to efficiently compare data sets for predicted position vs observed
position of asteroids

Observed near earth asteroids and submitted data using Astrometrica software to Las Cumbres Observatory (network of telescopes)

**App Development (2021)**: Programmed a mobile app called Punctual in 48 hours using Flutter to help students manage assignments and projects (Awarded 3<sup>rd</sup> place at Harvard-Westlake 2021 Hackathon from panel of professional judges)

Rise High Tutoring, Chief Tech Officer (2021): Created internal website using Firebase and React for <a href="https://www.RiseHighTutoring.org">www.RiseHighTutoring.org</a> to match 150 low income elementary students to 70 high school tutors for this 501(c)(3) non-profit organization

## Education & Activities : {

Harvard Westlake School, Los Angeles, CA, Class of 2024

Science Olympiad Team; Founder of Coding Club (2018 - 2021) (hosted weekly meetings, organized outside guest speakers, continued during pandemic); Golf Team (2019 - present), JV Captain;

USA Computing Olympiad (December 2020) : Silver Level

Los Angeles Computing Circle at UCLA (Summers 2021/ 2022): Student Engagement Award Winner (2021) as participant; invited back as 1 of 5 tutors for following summer},

## Coursework : {

UCLA CS 30 Principles and Practice of Computing (Summer 2021) : Awarded Class Certificate for placing 1<sup>st</sup> in final coding competition amongst 80 students

AP Computer Science A; Great Minds Robotics (coding classes 5 years); John Hopkins Center for Talented Youth, Intensive Studies, Fundamentals of Computer Science