

Ethan Knight

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PROJECTS (see also: github.com/hyperdo)

NLP Research — Researching in the field of natural language processing, focusing on machine comprehension and combinatorial categorical grammar

Machine Learning — ADHD classification project for a medical device

Nueva Programming Puzzles and Code Golf — Co-founder and author of the site that administers competitive programming challenges ppcgnewva.tk.

The Luca Bazooka — A Raspberry Pi+Arduino programmed robot to recognize and detect my classmate Luca's face as a target. Used OpenCV, SciPy stack.

Cyber-Political Research Project — Year-long research project relating to connected computing, global relations, and policy. Quest.ethanknight.xyz

USA Computing Olympiad (USACO) — Competing at Gold level.

Google FooBar Level 4 at age 14; too young to advance in the interview process.

RELEVANT COURSEWORK AND SKILLS

9th grade: Calculus, Cryptology, Computer Science, Mechatronics

10th grade: Multivariable Calculus, Linear Algebra, Machine Learning, Applied Mathematics

Languages: *Proficient:* Python (5–6 y.), LaTeX (3 y.).

Experience with: C++ (1–2 y.), Mathematica (1 y.), Julia (1 y.)

Libraries: *Proficient:* SciPy stack (NumPy, Pandas, Matplotlib, SKLearn, etc.), Flask, Asymptote, spaCy, Keras.

Experience with: NLTK, OpenCV, TFLearn/TensorFlow

ACADEMIC AWARDS

The Copernicus Prize, 2016 — 1st Place Award of \$10,000 for essay & video

Caroline D. Bradley Scholarship — Merit scholarship for 4 years of HS tuition

EMPLOYMENT

League Fellow *Paid internship with League of Creative Minds* — Summer 2016

Ethan's Hub *On-Demand 3D Printing Service* — April 2016 to present

Fencing Referee *for local & national foil events* — 2014 to present

ACTIVITIES

Nationally-Ranked Foil Fencer; League of Creative Minds, Model U.N. team (commendations: Harvard, MIT, Stanford, Georgetown NAIMUN); French Club, Community Service Club, Programming Contest Club (co-founder)

1171 Fife Avenue
Palo Alto, California 94301

EDUCATION

The Nueva School —

August 2015 to June 2019

Crystal Springs Uplands School — *2012 to 2015*

TEST SCORES

ACT — *Sept. 2016 (10th grade)*

Composite: 35 (PR: 99.7)

* English: 36 (PR: 99.96)

* Mathematics: 35 (PR: 99.7)

* Reading: 34 (PR: 99.1)

* Science: 36 (PR: 99.96)

ACT STEM Index: 36

PSAT — *Oct. 2016, 10th grade*

* Composite: 1520/1520

SAT 2 Subject Tests

* Math 2: 800 (9th grade)

SUMMER PROGRAMS

2016 LCM League Fellow

2015 ProveIt! Math Camp

2014 Quantum Camp
Chemistry & International
Fencing Camp, Poland

2013 AwesomeMath &
League of Creative Minds

2012 Stanford MS Summer
Institute, Physical Science &
Epsilon Math, 2nd Yr Prog.

PRIOR ACADEMIC AWARDS

* **Award of High Distinction,**
League of Creative Minds, 2014

* **AMC-8 Honor Roll 2014**

* **Duke Univ. Talent Search**
— Grand Ceremony, 2014

* **Julian C. Stanley Study of**
Exceptional Talent (SET)

* **Davidson Young Scholars**