

**EDUCATION**

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University of Southern California, Los Angeles, CA  
2015-2019      B.S. in Computer Science | Cumulative GPA: 3.5

Wauconda High School, Chicago, IL  
2011-2015      Cumulative GPA: 4.7 | ACT: 35

**WORK EXPERIENCE**

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USC Institute for Creative Technologies: Research Developer      October 2016- Current

- Implemented an NLP model to create a virtual mentor to respond to user questions with ~50% accuracy with a corpus of merely 500 recorded responses
- Prototyped and iteratively improved a desktop GUI with a 6-person team to educate youth through interactive mentorship
- Contributed to and published four (pending) academic papers in virtual learning, natural language processing, and patent law

USC Leonard Davis School of Gerontology: Full Stack Web Developer      July 2016- October 2016

- Redesigned over 20,000 lines of outdated code to improve functionality and user experience
- Developed and maintained interactive websites using HTML, CSS, and JavaScript

iD Tech Camps: Lead Instructor      May 2016- August 2016

- Taught and designed a week-long project based Python course to children ages 10 to 17 as a leader of 30 instructors

**PUBLICATIONS**

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- Critical Thinking Training: Proven New Technologies for Engaging DoD Personnel      ITSEC 2017
- Patent Law and Defense Technology: Original Intent and Current Practice      ITSEC 2017
- MentorPal: Interactive Virtual Mentors Based on Real-Life STEM Professionals      ITSEC 2017
- Enabling Computer Generated Interactive Conversation: New Technologies Address Turing's Challenge      SIW 2017

**TECHNICAL SKILLS**

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- Languages (working knowledge): Python, Java, JavaScript, HTML/CSS
- Languages (familiar): C++, SQL, Swift, Assembly
- Other: Python NLP libraries, building language models, basic machine learning, API web integration, AJAX, IT hardware and software support, web and graphic design, scripting for large data sets, Spanish (fluent), Chinese (Mandarin, basic)

**PROJECTS**

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- NLP/State Based Systems (Python) - Current
  - Designed and trained a language model to respond to live user utterances within the domain of STEM and the Navy
  - Created a smaller, faster, domain specific word2vec model from GoogleNews's word2vec model by analyzing word frequency and clumping words with similar vector values
  - Processed data sets of thousands of responses from user input to metric accuracy for publications and improvements
- Web Design (HTML, CSS, JavaScript, Java, SQL) – Spring 2017
  - Developed a real time mock-investment website using Bootstrap and jQuery, Java, and SQL
  - Collaborated with 4 developers to produce documentation, detailed design, and frameworks

**AWARDS**

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1. Invited to present at the 2017 Global Grand Challenges Summit on work in virtual learning and natural language processing
2. One of 20 elite students selected from over 300 applications for the 2017 Huawei Seeds for the Future fellowship for information and communications technology

**EXTRACURRICULARS**

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LavaLab: Developer      January 2017- May 2017

- Prototyped, developed, and marketed a mobile iOS application as a daily journal and wellness log

SC Outfitters: Guide      August 2016- Current

- Coordinated and led outdoor weekend and academic break excursions for groups of 8 to 12 USC students