

EDUCATION

Carnegie Mellon University

B.S., Stats/Machine Learning, '19*
minor in computer science*
minor in chemistry

COURSEWORK

Imperative Programming
Software Design
Statistical Methods
Discrete Math
Cognitive Psychology
Python Programming

SKILLS

PROGRAMMING LANGUAGES

C, Python, Java

TOOLS & FRAMEWORKS

Django, Angular2, Jekyll, Git,
HTML/CSS, Vim, L^AT_EX

DESIGN PROCESS

Wireframing, paper prototyping,
storyboarding

HONORS & AWARDS

- Feb '17 **2nd Place (\$1024), Overall**
HopHacks
- Feb '17 **APT Sponsor Award (\$600)**
TartanHacks
- Mar '15 **JSHS Program Scholarship**
Department of Defense
- Mar '15 **National JSHS, Presenter**
National Junior Science and Humanities Symposium
- Mar '15 **2nd Place, Overall**
New York Junior Science and Humanities Symposium
- Apr '14 **1st Place (\$150), Earth and Environmental Sciences**
WAC Invitational Science Fair
- May '14 **1st Place, Earth and Environmental Sciences**
NSF Noyce Science Fair

* denotes intended

EXPERIENCE

Carnegie Mellon School of Computer Science

pittsburgh, pa
fall '17

teaching assistant

Lead labs, hold office hours, and grade coursework for:
[fall '17] CS 15-122, Principles of Imperative Computation.

Fulcrum Global Technologies

chicago, il
summer '17

legal software developer intern

Team: DataZoo

- Created an ontology for a MarkLogic GraphDB using OWL and RDFS.
- Used ASP.NET MVC 5 Entity Framework to populate MarkLogic with a dynamic model of a law firm.

University of Washington

new york, ny

research assistant (remote)

spring '14, fall '14, spring '15

- Developed a program to automatically analyze and organize data from an FTP server from the National Oceanic and Atmospheric Administration (NOAA) station at Barrow, Alaska.
- Data were used to experimentally correct instrumentation bias of Arctic air temperature readings from the 1850s.

St. John's University

queens, ny
summer '14

research assistant in polymer nanostructures

- Devised a time efficient and green method for synthesizing polymer composites coated with gold nanoparticles (AuNPs).
- AuNP conjugated polymer composites were tested for their catalytic and artificial enzyme properties.

PROJECTS

Knowledge graph of political nexus [Spark, Kafka, NLTK, Neo4j, ElasticSearch, Flask, Angular2]

Nexus streams news articles in real time, tagging related entities in text. After constructing knowledge graphs, hidden insights regarding specific businessmen, politicians, etc. are made publically accessible through the Nexus API and client.

Messenger-based political assistant bot [Django, api.ai, NLTK, Microsoft Cognitive Services]

Doug provides a political news digest to users upon request across the Facebook Messenger interface. Based on the citizen's interests and values, they can seamlessly contact their senators, donate to causes, or get involved in local activism to make a difference.

Password security proof-of-concept program

[Python]

PasswordProtect collects and analyzes handwriting tendencies of different users. It is able to successfully differentiate between a profiled user and an imposter using less than 20 training instances per character.

HOBBIES

Long distance running, digital photography, journaling, guitar.

Updated 07/23/17