

Saniyah Shaikh

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Programming Languages:
Java, Python,
OCaml, Haskell,
Visual Basic,
HTML/CSS

Additional Skills:
Microsoft Office,
web scraping,
Solidworks,
Search Engine
Optimization
(SEO), teamwork,
leadership,
Spanish

GitHub:
[saniyah-shaikh](https://github.com/saniyah-shaikh)

LinkedIn:
www.linkedin.com/in/saniyahshaikh/

Research Highlights:
<http://blog.research.chop.edu/ready-self-driving-cars/>

OBJECTIVE

To gain challenging opportunities related to Computer Science, Robotics, and Connected Vehicles.

EDUCATION

Sophomore, University of Pennsylvania

BSE, Computer Science

Coursework:

Completed: CIS 120, 160, 121, 262, 240, 320, 552

Current: CIS 350 (Software Design & Engineering), NETS 150 (Market & Social Systems on the Internet)

Exp. Grad: May 2020

GPA: 3.54

Rochester Adams High School

Grad: June 2016

GPA: 4.32

Involved in FIRST robotics team (marketing captain in 2016, programmer, web designer), Business Professionals of America (2015-16 Vice President), 2016 National Merit Scholar

WORK EXPERIENCE

Engineering Research Assistant

Oct. 2016 - present

Children's Hospital of Philadelphia - Center for Injury Research & Prevention

- Working on first year of a research study about kids using highly autonomous vehicles
- Working on the second year of research concerning safety during a transition from autonomous to manual control of vehicle
- Year 1: Programmed simulator in **JavaScript**, assisted with testing & trials, **author on academic paper** in publication process, data processing in **Python**
- Mar 2017 - Wrote 7 pages of literature review on self-driving for 75 page proposal
- Jan 2018 - Attended Transportation Research Board (TRB) **97th Annual Meeting** in DC

CIS 120 Teaching Assistant

Fall & Spring 2017

University of Pennsylvania

- Course covers **Java**, **OCaml**, basic GUIs, data structures, code design & style
- Responsibilities include: co-teaching recitation section, grading homework, & answering student questions during office hours, review sessions, & online

Research Assistant

Summer 2016 & 2017

Wright Patterson Air Force Base / Automated Target Recognition Center

- Summer 2016: As a Wright Scholar, integrated 3D models from drone imaging into Google Earth & converted them to a military format
- Summer 2017: implemented the Monte Carlo Tree Search algorithm using **Python**, added heuristics, and created simulation of drone swarming using the algorithm

PROJECTS

- CIS 552 - created Sudoku game in Haskell with a partner: graphics using **gloss** and game generation using AC-3, inference, and backtracking
- Hacked at PennApps XV & FemmeHacks 2017 - worked on personal website in **HTML** and **CSS**
- Hacked at PennApps XVI - in team of three, created *sentimentex*, a webapp for analyzing text into 7 emotion categories using **Google Cloud ML** and **Natural Language Processing APIs**, and Python **Sci-Kit Learn**. Learned **web-scraping**, **feature extraction**, and front and back end integration with **Flask**

CLUBS

- Penn Women In Computer Science
 - Residential Program Board member 2016-17: Organized Girl Scout coding workshop
 - Mentorship Committee member 2017-18: organize mentorship program
- Ivy League Undergraduate Research Symposium (ILURS) - tech committee member
 - Work on website (ilurs.org), point woman for SEO

HOBBIES: traveling, swimming, baking, ballroom dance, volunteering for STEM activities