# Saniyah Shaikh

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

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**Programming** 

Languages:

HTML/CSS

Java, Python,

OCaml, Haskell, Visual Basic,

Additional Skills:

Microsoft Office,

web scaping, Solidworks,

Search Engine

Optimization

leadership,

(SEO), teamwork,

#### **E**DUCATION

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)

## Rochester Adams High School

Grad: June 2016 GPA: 4.32

Exp. Grad: May 2020

GPA: 3.54

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

## GitHub:

Spanish

saniyah-shaikh

#### LinkedIn:

www.linkedin.com /in/ saniyahshaikh/

## Website:

www.seas.upenn.e du/~saniyah/

## Research Highlights:

http:// blog.research.cho p.edu/ready-self -driving-cars/

### **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 (<u>ilurs.org</u>), point woman for SEO

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