

# Arnab K. Sarker

Software Engineer

## CONTACT ME

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## WORK EXPERIENCE

Amazon  
May 2017 - Present

### Software Engineering Intern

- Developing a web application to allow Audible employees to analyze test results from multiple testing sources
- Functioned as a full-stack developer and used Ruby on Rails to query a RESTful API made in Java, which queries a MySQL database (Amazon Aurora)
- Worked in the Scrum subset of Agile

UPenn  
May 2016 - Present

### Teaching Assistant - Mathematical Foundations of Computer Science

- Prepare weekly recitations covering counting, sets, probability, graph theory, and proofs by induction
- Grade weekly homework and midterm exams for over 200 enrolled students

UPenn  
May 2016 - Present

### Teaching Assistant - Mathematical Foundations of Computer Science

- Hold weekly office hours, covering topics such as Bayes' rule, probability densities, and random variables
- Design recitation problems to motivate students to develop problem-solving skills

## PROJECTS

Clever Crosswalk

- Worked closely with the GRASP laboratory to construct speaker that uses sound wave interference to aid visually impaired and blind people from crossing the street
- Developed a GUI in C++ that used facial recognition technology to follow the pedestrian along the intersection

Street Eats

- Developed an Android app that allows users to find food trucks nearby and contact owners who are registered with app

Political Tracker

- Designed and implemented application in Java that gathers data from Twitter users across the country and uses Natural Language Processing and curated data from primary election results to predict the outcome of the election

## EDUCATION

University of Pennsylvania  
Grad: May 2019

B.S. in Networked and Social Systems Engineering

GPA: 4.00

Relevant Coursework:

- Algorithms
- Microeconomics
- Software Engineering
- Probability Theory
- Theory of Networks
- Signal Processing

Organizations:

- President of the Eta Kappa Nu Honor Society
- Treasurer of Alpha Sigma Phi Fraternity