TANVI BAJPAI

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609.937.8919

// EDUCATION

Carnegie Mellon University
B.S. Computer Science
B.S. Discrete Math and Logic
Graduation: May 2019
QPA: 3.5

Program in Algorithmic and Combinatorial Thinking (PACT), Princeton University
2014 – 2016
Studied under
Professor Rajiv Gandhi (RU-C, UPenn)

// COURSE WORK
- A Theorist's Toolkit
- Spectral Graph Theory
- Algorithm Design and Analysis
- Computational Discrete Math
- Compiler Design

// TECHNICAL SKILLS
Programming Languages
- Java
- C
- SML
- OCaml
- Python
- HTML/CSS
- JavaScript/Node.js

// ACHIEVEMENTS
- **SCS Dean's List** for Fall 2017 and Spring 2018
- **Stehlik Undergraduate Impact Scholarship Recipient** - 2018
- **Member of the CMU SCS Dean Search Committee** - 2018

// EXPERIENCE

Teaching Assistant at CMU   Fall 2016 - present
Developing class materials to teach the fundamental math concepts for Computer Scientists such as logic, sets, and combinatorics. (Mathematical Foundations for Computer Science). Also TA'd for a senior level algorithms course: Algorithm Design and Analysis

Researcher at CMU   Fall 2016-present
Modelled recommendation systems as subgraph selection and network flow problems with Professor R. Ravi. In the process of submitting paper to SIAM Journal on Mathematics of Data Science. Currently working on discrete algorithms for ranking problems.

Researcher at UMD   Summer 2018
Designed ML algorithms that aimed to prevent bias in decision making (specifically, a fair version of the k-center clustering problem). Worked with Professor Samir Khuller as part of an REU program (REU-CAAR).

Head Teaching Assistant at CMU   Fall 2017- present
Leading staff of TAs and preparing recitation guides and review notes for courses Mathematical Foundations in Computer Science and Introduction to Logic and Proofs.

Intern at Microsoft   Summer 2017
Developed SDK to aid in chat-bot creation. Demonstrated the functionality of SDK by creating a moderator chat-bot that would monitor the overall sentiment of a chat in Xbox Live. Worked on the XBL Social team and for their affiliate streaming platform Mixer.

// ADDITIONAL INVOLVEMENT

- **TEDxCMU** 2016: External Speaker Curator, Event Coordinator
- **Women@SCS** 2017-present: Graduate Liaison and Undergrad-Grad event planner.
- **SCS Tours and Panels** 2016-present: Organizer