# PRANJALI SHARMA

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### **EDUCATION**

Columbia University, The Fu Foundation School of Engineering and Applied Science

New York, NY

October 2019

Bachelor of Science in Computer Science, Major GPA- 4.0/4.0, Cumulative GPA- 3.79/4.0

Expected May 2022

*Relevant Coursework:* Data Structures and Algorithms in Java, Introduction to Computer Science and Programming in Java, Calculus, Introduction to Python, Advanced Programming in C, Discrete Mathematics

Academic Honors- Dean's List (Fall 2018 and Spring 2019)

### **ENGINEERING PROJECTS**

• Web Server- December 2019

Created a web-server from scratch that implements three-tier architecture using Sockets API in C language

• MyString Type - November 2019

Implemented the String class from pre-defined C libraries with modified functionality in a UNIX environment

• 3-1-1 Housing Notification-

Built the email notification feature by implementing SendGrid API in Flask for housing complaints in NYC

• Inter-city NavigationDeveloped a program in Java that outputs the shortest path between multiple American cities on the map using Dijkstra's algorithm

• Video Poker
January 2019

Wrote the backend program for a video poker game in Java using multiple classes and object-oriented programming

• Wine Classifier using ML
January 2019

Designed and trained a classifier in Python that predicts whether a wine is red or white based on the given chemical factors

#### PROFESSIONAL EXPERIENCE

### **Emerging Scholars Program, Columbia University**

New York, NY

Workshop Facilitator

September 2019 - Present

- Conducted weekly workshops to familiarize prospective Computer Science majors with the various aspects and applications of CS in the real world
- Taught the basics of topics like Computer Linguistics, UI/UX design, Cryptography, Networks, Algorithms, and Artificial Intelligence

#### Indian Institute of Technology, Delhi

New Delhi, India

Summer Research Intern

June - July 2019

- Developed an algorithm to increase the accuracy of object detection by implementing a unique collaborative algorithm in a network of IoT devices
- Revamped a pre-existing collaboration protocol to work on both static and mobile IoT devices without compromising on accuracy using Keras and Python libraries

## **Department of Mathematics, Columbia University**

New York, NY

Teaching Assistant

September 2019- Present

- Taught key concepts of Calculus I to over 200 students in weekly office hours, emails, and tutoring sessions
- Assisted with grading weekly assignments, creating problem sets, review documents, and exam preparation material

### LEADERSHIP EXPERIENCE AND EXTRACURRICULARS

## Columbia University, NCAA Division I Women's Squash Team

New York, NY

Member

September 2018 - Present

- Dedicate 15 hours per week to practice, conditioning, competitions, and team meetings while balancing an engineering course load
- Serve as a weekly academic and squash volunteer for high school students at the Street Squash Center

### Columbia Social Entrepreneurship Group

New York, NY

Technical Member

September 2019 - Present

- Designed the email notification feature in 3-1-1 housing notification website using SendGrid API in Flask
- Developed the backend of the 3-1-1 notification website which uses the NYC database to notify residents about landlord complaints

## Women in Computer Science

New York, NY

Event Coordinator

January - May 2019

- Organized and volunteered in NetWics- Networking Event and DivHacks- Columbia's only diversity centric hackathon
- Contributed actively in weekly meetings to increase female engagement in Computer Science both on campus and in local schools

#### **International Student Orientation Program**

New York, NY

Orientation Leader

August - September 2019

- Led groups of first-year college students throughout the pre-orientation program and helped them get adjusted to college culture
- Worked as a part of a larger team of student leaders to achieve common goals and prevent conflicts in a team setting

#### **SKILLS**

- Java, Python, HTML, C, and C++
- Resident Advisor for Columbia Housing