Manav Goel

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EDUCATION

Columbia University, *New York, NY* *Expected May 2021*

B.S. in Computer Science, Minor in Applied Mathematics, GPA: 3.8/4.0 (Dean's List)

Relevant Coursework: Large Scale Distributed Systems, Machine Learning, UI Design, Adv. Programming in C/C++, Intro. to Databases, Computer Science Theory, Data Structures in Java, Computing for Engineers in Python, Fundamentals of Computer Systems, Linear Algebra, Discrete Mathematics, Multivariable Calculus

WORK EXPERIENCE

Bloomberg LP, *New York, NY* *May 2019 - Aug. 2019*

Software Engineer Intern, System Security

- Integrated Bloomberg's core single sign-on infrastructure with tools used by over 5,000 engineers for access to development and production Unix machines in order to enhance security and improve developer experience
- Designed and implemented strong network client/server authentication service using Kerberos protocol
- Built and deployed Django service to allow users to remotely download SSH keys for use with SFTP gateways
- Improved debugging tools used in Bloomberg's single sign-on infrastructure

FairFare Inc., *New York, NY* *May 2018 - Aug. 2018*

Software Engineer Intern

- Implemented scalable backend for application using AWS Mobile App Backend (API Gateway, Lambda)
- Configured MySQL database in Elastic Cloud Compute to store data for over 1,000 users and 5,000 rides
- Refactored API to follow RESTful best practices, helped add OAuth 2.0 authorization for more secure experience
- Integrated Amazon Incentives API with sandbox testing to retain active users and attract new customers

Neural Acoustic Processing Lab, *New York, NY* *May 2018 - Jan. 2019*

Research Intern

- Work with Columbia PhD candidate to develop novel system to perform real-time single source audio separation
- Designed and implemented multi-threaded Python I/O script to parse audio stream, reduced latency by 11 ms
- Porting system to physical device (BeagleBone Black/ Raspberry Pi) for use with schizophrenic patients
- Developed web application in Flask for newest audio separation model for easy demonstration and testing

Spectator Publishing Company, *New York, NY* *Jan. 2018 - Jan. 2019*

SpecTech Associate Developer

- Develop, iterate, and launch live website features for Columbia Daily Spectator in JavaScript, HTML/CSS
- Helped migrate over 40 web features to predominantly JavaScript stack (React, Node.js, etc.)
- Supply front-end maintenance and solutions working with Spectator design team and Washington Post API

ACTIVITIES

Columbia Application Development Initiative, *New York, NY* *Sept. 2017 - Present*

- Participate in technology-interest student group with technical workshops, discussions, and professional development

Columbia Bhangra Dance Team, *New York, NY* *Sept. 2017 - Present*

Team Secretary

Columbia University Orchestra, *New York, NY* *Sept. 2017 - Present*

AWARDS/HONORS

Engineering : Stratasys 2016 Extreme Redesign Challenge Semifinalist, 2016 TEAMS Ntl. Champions
Other : Eagle Scout Award, NASA Earth System Science Award, USMA Metric Award

SKILLS & OTHERS

Languages : Proficient in Python, Java, JavaScript, HTML/CSS, LaTeX
Some experience in C, C++, MATLAB, PHP, SQL, Swift