

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