

Somdeep Dey

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EDUCATION

COLUMBIA UNIVERSITY | MASTERS IN COMPUTER SCIENCE

Expected Dec 2016 | New York, NY • GPA: 3.87/4.0

Analysis of Algorithms | Cloud and Big Data | Micro Services Apps APIs | OS | Database Systems Implementation

PUNE INSTITUTE OF COMPUTER TECHNOLOGY (PICT) | BE IN COMPUTER SCIENCE

May 2015 | Pune, India • GPA: 3.6/4.0

Operating Systems | Compilers | Advanced DBMS | Algorithms | Software Architecture | Distributed OS

EXPERIENCE

NEXTJUMP | SOFTWARE ENGINEERING INTERN

June 2016 – Present | New York, NY

Working on the Onecart team using a combination of PHP and Go to build backend APIs and service points for the Onecart experience serving as the central point of search and payment for Next Jump's millions of users on the Perks at Work platform.

COLUMBIA UNIVERSITY | GRADUATE COURSE ASSISTANT

January 2016 – May 2016 | New York, NY

- Programming for Entrepreneurs in the SIPA school, grading and assisting students with building websites.
- Topics in Software Engineering in the CS department, providing feedback as students research topics.

OPEN SOURCE WORK AND RESEARCH

FASTER SPACEMAN | XFS FILE SYSTEM DEFRAGMENTER UTILITIES IMPLEMENTED USING C

Sep 2014 – May 2015 | Pune, India

- 'Spaceman': generated free space report of the overall filesystem, enabling freespace defragmentation.
- Made headway into partial defragmentation (portions of large files), hitherto untried across file systems.
- Dave Chinner, maintainer of XFS, reviewed all patches, features were included in the Linux Kernel (3.19).
- 'FaSteR Spaceman' discussed by experts at Linux Filesystem Storage and Memory Management Summit (LSFMM - 2015).

SCHOOL PROJECTS

FLATMATE.IO | ROOMMATE FINDER BASED ON MEAN STACK AND BLUEMIX

Dec 2015 | Columbia University, New York, NY

Collaborative filtering using Facebook and LinkedIn data, thus aligning personal and professional matches. Auto-scaling messaging infrastructure to ensure users have real-time connectivity and face no downtime.

STUDENT-COURSE MANAGEMENT SYSTEM | K-12 SYSTEM USING MICRO SERVICES ARCHITECTURE.

Oct 2015 | Columbia University, New York, NY

Implemented z-axis scaling, live schema change for administrators, single point of reference API gateway, ref-integrity using RabbitMQ, auto instance creation on increased data and data partitioning on surnames.

TWEETGEO | JAVA WEB APP ON ELASTIC BEANSTALK DEPICTING MAP WITH REAL TIME TWEETS

Sept 2015 | Columbia University, New York, NY

Twitter Live API data streamed to map using WebSockets, depicting trend heatmap geographically. Sentiment analysis of tweets using multi-threaded worker pool, highlighting public opinion of events.

VIRTUAL LEARNING ENVIRONMENT | JAVA-BASED VLE HOSTING ASSIGNMENTS AND VIDEOS.

Jan 2014 - May 2014 | PICT, Pune, India

Private cloud infrastructure on Eucalyptus for use only within PICT Computer Science department. Role based access control, discussion board for interaction, email updates, timetable export and import and adaptive tests to ensure one-stop solution.

TECHNICAL SKILLS

Java, C, C++, SQL, Node.js, JavaScript, Python, PHP, Linux, Go, Hadoop, XAMP, Git, HTML, Bootstrap, Angular, AWS, Mongo