Divyanshu Talwar

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WORK EXPERIENCE Goldman Sachs Associate, Resilience Engineering Jan 2022 - Present Engineering applications to catalog, test, and discover operational dependencies, facilitating comprehensive recovery plan creation for effective business disruption risk mitigation. Areas: Java, Python, Bash, Kubernetes, SQL, MongoDB. Analyst, Technology Risk May 2019 - Dec 2021 Engineered solutions for fast and reliable security incident identification and triage. Areas: Python, Bash, Kafka, ksqlDB, AWS. Indraprastha Institute of Information Technology (IIIT), Delhi Teaching Assistant, Probability and Statistics Jan 2019 - May 2019 Held weekly tutorials and office hours, helped prepare and grade assignments and exams. Undergraduate Researcher Jan 2018 - May 2019 Developed novel solutions for and using sparse-matrix imputation, achieving state-of-the-art results. Advisor: Dr. Angshul Majumdar Undergraduate Researcher Dec 2017 - Nov 2018 Worked on non-adversarial generative solutions, using disentangled latent representations, for facial images. Advisor: Dr. Saket Anand **EDUCATION** IIIT Delhi New Delhi, India Bachelor of Technology in Computer Science and Engineering CGPA: 9.84/10 Aug 2015 - May 2019 Ranked among the top 1% of the institute.

PUBLICATIONS

Divyanshu Talwar, Aanchal Mongia, Emilie Chouzenoux, Angshul Majumdar; Binary Matrix Completion on Graphs: Application to Collaborative Filtering. Digital Signal Processing Vol. 122, 103350 (2022).

Divyanshu Talwar, Aanchal Mongia, Debarka Sengupta, Angshul Majumdar; AutoImpute: Autoencoder based imputation of single-cell RNA-seq data. Scientific Reports, Nature Vol. 8, 16329 (2018).

SELECTED PROJECTS

ShakaLakaBoomBoom	3D scene generation with inflated 2D sketches, maneuvered using hand-gestures.	2019
Parallel DFS	CUDA C++ implementation of the parallel DFS algorithm offering a 1.75 \times speedup.	2018
Mapbots	Mapping rooms using an ultrasonic sensor ring mounted on an autonomous bot.	2016

SKILLS

Programming: Python, C, C++, Java, Bash, C#, MATLAB, JavaScript.

Frameworks and Tools: PyTorch, CUDA, Kafka, ksqlDB, Kubernetes, SQL, MongoDB, OpenGL, Unity.

AWARDS AND RECOGNITION

Dean's List for academic excellence awarded in all years at IIIT Delhi.	2016 - 2018
First runner up at Code-Off: All-India Hackathon with over 350 participating teams.	Oct 2017
Country topper at the Third Amity International Olympiad for Physics.	May 2014

VOLUNTEER EXPERIENCE

Mentored underserved college students, assisting them with interview preparations.	Sept 2022 - Mar 2023
Representative for the computer science class at Student Senate, IIIT Delhi.	Apr 2018 - May 2019
Coach to Team Victorious Secret, providing guidance throughout their RGSoC journey.	Jul 2017 - Sept 2017
Facilitated mathematics and science tutorials for underserved school students.	May 2016 - Jun 2016

RELEVANT COURSEWORK

Machine Learning	GPU Computing	Computer Graphics	Algorithm Design	Virtual Reality
Theory of Computation	Linear Algebra	Probability & Statistics	Security Analysis	Portfolio Management

INTERESTS AND HOBBIES

Puzzles, Tabla, Bonsai care and Yoga.