

Prithviraj Sengupta

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EDUCATION

UNIVERSITY OF ILLINOIS

PHD IN COMPUTER SCIENCE

Joined August 2018 | Expected May 2024 | Chicago, Illinois, USA

GPA: 3.66/4.0

Advisor: Prof. Bhaskar DasGupta

KIIT UNIVERSITY

B.TECH IN COMPUTER SCIENCE

Grad. April 2018 | Bhubaneswar, Odisha, India

Cum.CGPA: 7.46/10

DELHI PUBLIC SCHOOL

Grad. May 2014 | Ranchi, Jharkhand, India

COURSEWORK

UNDERGRADUATE

Data Structures

Object-Oriented Programming

Operating Systems

Design and Analysis of Algorithms

Computer Networks

Computer Organisation and Architecture

Compilers + Practicum

Internet of Things

GRADUATE

Computer Algorithms II

Artificial Intelligence

Database Management System

UI Design

Software Engineering

Quantum Computing

Randomized Algorithms

Applied Graph Theory

Computational Molecular Biology

Foundations of Blockchain

SKILLS

PROGRAMMING

Python • Matlab • C++

Java • \LaTeX

C • Android • JavaScript • MySQL

EXPERIENCE

META (FORMERLY FACEBOOK) | PHD SOFTWARE ENGINEER INTERN

May 2022 – August 2022 | Menlo Park, California | USA

Worked with the AI metadata team. Built service and data pipelines to track ML model metadata and researched possible improvements in tracking duplicate data to empower privacy engineers.

UNIVERSITY OF ILLINOIS AT CHICAGO | LEAD INSTRUCTOR

June 2021 – August 2021 | Chicago, Illinois | USA

Taught Mathematical Foundations of Computing to undergraduate students. My responsibilities included giving lectures, exams, grading and giving feedback to the students.

THEORETICAL COMPUTER SCIENCE GROUP, UIC | RESEARCH ASSISTANT

August 2019 – Present | Chicago, Illinois | USA

Working on different problems related to network/graph theory. Particularly, my work revolves around complex network analysis and anomaly detection using global curvatures. My work resulted in new bounds on approximate and exact computation of Ollivier-Ricci curvature.

UNIVERSITY OF ILLINOIS AT CHICAGO | TEACHING ASSISTANT

August 2018 – Present | Chicago, Illinois | USA

Teaching Theory of Computation (Languages and Automata) to undergraduates with a class size of around 100 students. My responsibilities include leading the lab discussions, grading and proctoring. Previously, I was teaching Introduction to Programming with Python and Mathematical Foundations of Computing.

DELOITTE USI RISK AND FINANCIAL ADVISORY | ADVISORY ANALYST

Jan 2018 – May 2018 | Bangalore, Karnataka | India

Worked on two different solutions namely Application Security (AppSec) and Identity and Access Management (IAM). Provided services to clients around ERP Security and Identity Management. The tools I worked on were SAP, Oracle and Sailpoint. Also worked on an Innovation Project on Open Banking which won the best project award.

PAPERS/AWARDS

- Paper titled "A Review of and Some Results for Ollivier-Ricci Network Curvature" accepted and published in Mathematics, 2020.
- Paper titled "Classification of Computer Generated and Natural Images based on Efficient Deep Convolutional Recurrent Attention Model" accepted and presented at Workshop on Media Forensics, CVPR 2019, Long Beach, USA.
- Paper titled "Source Anonymization of Digital Images: A Counter-Forensic Attack on PRNU based Source Identification Techniques" presented in Annual Conference on Digital Forensics, Security and Law (ADFSL) 2017, Florida, USA.
- Best Innovation Project Award by Deloitte USI Risk and Financial Advisory for finding out possible directions where the firm could utilize "Open Banking".