Saiteja Utpala

Email: saitejautpala@gmail.com

Mobile: +1-8207582399 Mobile: +91-9701849586

### **EDUCATION**

• Indian Institute of Technology, Kanpur

Master of Technology in Computer Science; Academic Excellence Award

• Sri Venkateswara University College of Engineering

Bachelor of Technology in Mechanical Engineering; First Class With Distinction Aug. 2018 – Jul 2020

Kanpur, India

Tirupathi, India Aug 2013 – Apr 2017

## EXPERIENCE

### • Independent Researcher

Independent Researcher

Jun 2022 - now

overview: Conducted Research at intersection of Differential Privacy and Riemannian Optimization.

Currently, two preprints are under review and built open source library for Riemannian Optimization in JAX.

### • University of California, Santa Barbara

Staff Research Associate

Santa Barbara, US

Dec 2021 - Jun 2022

overview: Conducted Research at intersection of Differential Privacy and Geometric statistics. Currently, one preprint is under review.

#### • Geomstats

Lead Engineer and Maintainer

May 2021 - Present

overview: Responsible for complete overhauling of the library both on performance and testing front.

• Mastercard

Pune, India

 $Software\ Development\ Engineer$ 

Aug 2020 - Dec 2021

overview: Built a new Data visualization tool for fraud detection of financial data (credit, debit card transaction) for some of biggest banks in spain from scratch using React, Javascript.

#### **PUBLICATIONS**

- Rieoptax: Riemannian Optimization in JAX. Saiteja Utpala, Andi Han, Pratik Jawanpuria, Bamdev Mishra. 14th International OPT Workshop on Optimization for Machine Learning, NeuRIPS 2022. (arxiv). Topic (Open source library, Riemannian Optimization, JAX).
- Biological Shape Analysis with Geometric Statistics and Learning. Saiteja Utpala and Nina Miolane, Snapshot of Modern Mathematics Oberwolfach (Oberwolfach). Topic : (Geometric Statistics).
- Differentially Private Fréchet Mean on the Manifold of Symmetric Positive Definite (SPD) Matrices. Saiteja Utpala, Praneeth Vepakomma, Nina Miolane. *Under Review at TMLR*. (arxiv). Topic : (Differential Privacy, Geometric Statistics).
- Shrinkage Estimation of Higher Order Bochner integrals. Saiteja Utpala and Bharat K. Sriperumbudur. *Under Review at Bernoulli.* (arxiv): Topic (Learning theory).

# ACHIEVEMENTS

- Co-winner of Computational Geometry & Topology Challenge 2021
- Achieved 10/10 in Machine Learning and Statistics Courses at IIT Kanpur
- Received the Academic Excellence Award for exceptional performance in 2018-19 academic session at IIT Kanpur
- Secured All India Rank 308 in GATE computer science among 107,893 candidates