Apratim Bhattacharyya

Address: University of Tübingen
Maria-von-Linden-Straße 6,
72076 Tübingen
Personal Webpage: apratimbhattacharyya18.github.io
Email: apratim.bhattacharyya@uni-tuebingen.de
Date of Birth: 14.12.1991

Current Position

July 2021 - current	Postdoc, Autonomous Vision Group, University of Tübingen Supervisors: Dr. Andreas Geiger Research Focus: Generative Modelling and Autonomous Driving.

Education

September 2021	PhD (summa cum laude), Max Planck Institute for Informatics, Germany Thesis: Long-term Prediction under Uncertainty and Multi-modality. Supervisors: Dr. Bernt Schiele and Dr. Mario Fritz
September 2016	Master of Science in Informatics, Saarland University, Germany GPA: 1.1, Honor's Degree (Best GPA: 1) Thesis: Efficiently Summarising Sequences with Rich and Interleaving Patterns. Advisor: Dr. Jilles Vreeken
May 2014	Bachelor of Technology in Computer Engineering, National Institute of Technology, Karnataka, India GPA: 9.28 (Best GPA: 10)

Professional Experience

April-July 2019	PhD Intern, Bosch Center for Artificial Intelligence Group: Environmental Understanding and Decision Making Topic: Anticipation for Autonomous Driving .
May-July 2013	Intern, TU Dresden Supervisor: *Dr. Yue Ma* Topic: Multi-label Classification over Ontologies

Research Interests

• Probabilistic Modelling. • Bayesian Learning. • Latent Variable Models.

Scholarships

2014 Saarbrücken Graduate School of Computer Science (Preparatory Phase).
2014 Campus France Charpak scholarship (Masters).
2014 European Master's Program in Computational Logic Grant.
2013 DAAD - Working Internships in Science and Technology Scholarship.
2010 All India Engineering Entrance Examination: In the top 1%.

Professional Activities

• Reviewer: *ICML 2020, NeurIPS 2019-20, ICCV 2019, CVPR 2018-21, TPAMI, AAAI 2019-21, ICLR 2021.*
• Invited Talk: IEEE IV'21 Workshop, Naturalistic Road User Data and its Applications for Automated Driving.

Teaching

- Tutor: *Self Driving Cars, Winter Semester 2021-22.*
- Tutor: *Probablistic Graphical Models, Winter Semester 2020-21.*
- Tutor: *Machine Learning Core Course (Stammvorlesung), Winter Semester 2019-20.*
- Tutor: *Machine Learning Core Course (Stammvorlesung), Winter Semester 2018-19.*

Publications

2021 Euro-PVI: Pedestrian Vehicle Interactions in Dense Urban Centers
A. Bhattacharyya, D. Reino, M. Fritz and B. Schiele, CVPR, 2021
2020 Haar Wavelet based Block Autoregressive Flows for Trajectories
A. Bhattacharyya, C. Straehle, M. Fritz and B. Schiele, GCPR, 2020 **(oral)**
2020 Normalizing Flows with Multi-scale Autoregressive Priors
A. Bhattacharyya[*]*, S. Mahajan*[*]*, M. Fritz, B. Schiele and S. Roth*, CVPR, 2020
2019 Updates-Leak: Data Set Inference and Reconstruction Attacks in Online Learning
A. Salem, A. Bhattacharyya, M. Backes, M. Fritz and Y. Zhang, USENIX Security, 2020
2019 Bayesian Prediction of Future Street Scenes using Synthetic Likelihoods
A. Bhattacharyya, M. Fritz and B. Schiele, ICLR 2019
2018 Accurate and Diverse Sampling of Sequences based on a "Best of Many" Sample Objective
A. Bhattacharyya, B. Schiele and M. Fritz, CVPR 2018 **(oral)**
2018 Long-Term On-Board Prediction of People in Traffic Scenes under Uncertainty
A. Bhattacharyya, M. Fritz and B. Schiele, CVPR 2018
2018 Long Term Image Boundary Prediction
A. Bhattacharyya, M. Malinowski, B. Schiele and M. Fritz , AAAI 2018
2017 Efficiently Summarising Event Sequences with Rich Interleaving Patterns
A. Bhattacharyya and J. Vreeken , SDM 2017
2017 Long-Term On-Board Prediction of Pedestrians in Traffic Scenes
A. Bhattacharyya, M. Fritz and B. Schiele, CoRL 2017 Workshop track.
2016 Long Term Boundary Extrapolation for Deterministic Motion
A. Bhattacharyya, M. Malinowski and M. Fritz, NIPS Workshop on Intuitive Physics, 2016

Language Skills

• English: *Fluent.* • German: *B1.* • Assamese: *Native.* • Hindi: *Native.*

Other Interests

• Sports: *Running, Badminton, Hiking.* • Music: *Piano.* • Literature: *Science Fiction.*