

Rhea Sukthanker

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EDUCATION

MACHINE LEARNING LAB - UNI FREIBURG

EFFICIENT AND MULTI-OBJECTIVE NEURAL ARCHITECTURE SEARCH - SUPERVISED BY **PROF. DR. FRANK HUTTER**

Feb 2022 - Now | Freiburg, DE

ETH ZURICH

MASTERS IN DATA SCIENCE

Sep 2018 - Jun 2021 | Zurich, CH

GPA: 5.39/6

VELLORE INSTITUTE OF TECHNOLOGY

BACHELORS IN INFORMATION TECHNOLOGY

July 2014- Jun 2018 |Vellore, India

GPA: 9.75/10

LINKS

LinkedIn: [RHEASUKTHANKER](#)

Github: [@RHEASUKTHANKER](#)

Google Scholar: [//RHEASUKTHANKER](#)

COURSEWORK

GRADUATE

- Advanced Machine Learning
- Big Data
- Computational Intelligence Lab
- Natural Language Understanding
- Data Science Lab
- Computer Vision
- Deep Learning
- Statistical Learning Theory
- Research in Data Science

SKILLS

PROGRAMMING

Over 5000 lines:

Java • Shell • Python • Pytorch • \LaTeX • Tensorflow

Over 1000 lines:

C • C++ • CSS • PHP • JavaScript • Assembly

Familiar:

AWS • iOS • MySQL • Azure • MongoDB

RESEARCH

CVL ETH ZURICH | STUDENT RESEARCHER | SUPERVISORS: **DR. ZHIWU HUANG, DR. SURYANSH KUMAR, PROF. DR. LUC VAN GOOL**

March. 2020 – April 2021| Zurich, CH [[Code](#),[Python](#)]

- Proposed a novel [Neural Architecture Search Problem for SPD Manifold Networks](#) achieving upto 12% relative improvement in performance.
- [Master thesis](#) on Attention in Generative Models for Efficient Visual Super Resolution

CIL NANYANG TECHNOLOGICAL UNIVERSITY | RESEARCH ASSISTANT | SUPERVISOR: **DR. ERIK CAMBRIA**

May 2017-July 2017 and Jan 2018 – May 2018 | Singapore

- Published a first author review paper on [Anaphora Resolution](#).
- Improved the accuracy of SOTA Coreference Resolution Models by upto 0.3% by commonsense knowledge induction

AWARDS

2018 State [Goa Scholars 2018-19](#)
2018 International [ETH Zurich Excellence Scholarship](#)

PUBLICATIONS/PREPRINTS

- [1] S. Dooley, R. S. Sukthanker, J. P. Dickerson, C. White, F. Hutter, and M. Goldblum. [On the Importance of Architectures and Hyperparameters for Fairness in Face Recognition](#). In Workshop on Trustworthy and Socially Responsible Machine Learning, NeurIPS 2022 (full paper accepted at NeurIPS 2023 (oral)), 2023.
- [2] S. Schrodli, D. Stoll, B. Ru, R. Sukthanker, T. Brox, and F. Hutter. [Towards discovering neural architectures from scratch](#). NeurIPS 2023, 2023.
- [3] R. Sukthanker, S. Poria, E. Cambria, and R. Thirunavukarasu. [Anaphora and coreference resolution: A review](#). Information Fusion, 59:139–162, 2020.
- [4] R. S. Sukthanker, Z. Huang, S. Kumar, E. G. Endsjo, Y. Wu, and L. Van Gool. [Neural Architecture Search of SPD Manifold Networks](#). International Joint Conference on Artificial Intelligence, 2021.
- [5] R. S. Sukthanker, Z. Huang, S. Kumar, R. Timofte, and L. Van Gool. [Generative Flows with Invertible Attentions](#). CVPR 2022, 2022.
- [6] C. White, M. Safari, R. Sukthanker, B. Ru, T. Elsken, A. Zela, D. Dey, and F. Hutter. [Neural architecture search: Insights from 1000 papers](#). arXiv preprint arXiv:2301.08727, 2023.
- [7] Y. Wu, Z. Huang, S. Kumar, R. S. Sukthanker, R. Timofte, and L. Van Gool. [Trilevel Neural Architecture Search for Efficient Single Image Super-Resolution](#). CVPR NAS Workshop 2022, 2022.