SHASHANK AGNIHOTRI

shashanksagnihotri@gmail.com | shashank.agnihotri@uni-mannheim.de | +49 1746375197 | Google Scholar | Github |

Education

PhD Candidate in Computer Science, Universität Siegen (RA at Uni Mannheim)	June 2022 - Currently Pursuing
Master of Science in Computer Science	October 2018 - September 2021
Albert Ludwigs University of Freiburg, Germany	2.0 Grade (German System)
Bachelor of Engineering, Computer Engineering	August 2014 - July 2018
VESIT, Mumbai University	CGPI – 7.86
Indian School Certificate	May 2014
Smt. Sulochanadevi Singhania School, Thane	Percentage – 92.4%
Indian Certificate of Secondary Education	May 2012
Smt. Sulochanadevi Singhania School, Thane	Percentage – 94.0%

Papers and Chapter Published

- Agnihotri, Shashank, Julia Grabinski, and Margret Keuper. "Improving Stability during Upsampling--on the Importance of Spatial Context." accepted at European Conference on Computer Vision (ECCV), 2024.
- Agnihotri, Shashank, Jung, Steffen, and Margret Keuper. "CosPGD: a unified white-box adversarial attack for pixel-wise prediction tasks." accepted at International Conference on Machine Learning (ICML), 2024.
- Agnihotri, Shashank, Kanchana Vaishnavi Gandikota, Julia Grabinski, Paramanand Chandramouli, and Margret Keuper. "On the Unreasonable Vulnerability of Transformers for Image Restoration-and an easy fix." In Proceedings of the IEEE/CVF International Conference on Computer Vision, pp. 3707-3717. 2023.
- Sommerhoff, Hendrik, Shashank Agnihotri, Mohamed Saleh, Michael Moeller, Margret Keuper, and Andreas Kolb. "Differentiable Sensor Layouts for End-to-End Learning of Task-Specific Camera Parameters." accepted at International Conference on Computational Photography (ICCP), 2024.
- Hoffmann, J., Agnihotri, S., Saikia, T. and Brox, T., 2021. Towards improving robustness of compressed CNNs. In ICML Workshop on Uncertainty and Robustness in Deep Learning (UDL).
- S. Khedkar, S. Agnihotri, A. Agarwal, M. Pancholi, and P. Hande, "Author Identification using Stylometry," 2018 International Conference on Smart City and Emerging Technology (ICSCET), 2018, pp. 1-4, DOI: 10.1109/ICSCET.2018.8537362.
- Khedkar, S. Agnihotri, S. Agarwal, A. Pancholi, M. and Hande, P. (2018). Stylometry Based Authorship Identification. International Journal for Research in Applied Science and Engineering Technology, 6, 3899-3906.
- **Chapter in Book**: Kumar, Munish, 1984-, (editor.) 2020, Feature extraction and classification techniques for text recognition, Engineering Science Reference, an imprint of IGI Global, Hershey, PA

Software Proficiencies and Spoken Languages

- Programming languages C, C++, C#, Python & Java.
- Database MS SQL & Oracle.
- Web technologies HTML5, CSS3, JavaScript, Servlets.
- Tools Android Studio, Netsim, WAMPP, BlueJ, AutoCAD, Visual Studio & NetBeans IDE, Solidworks.
- Numerical computation software- Octave, Matlab.
- Basic Proficiency PHP, MySQL & Ultimaker Cura.
- Spoken Languages English, Hindi, Marathi, and German(A2.1)

Internship and Student Jobs

AutoML Group, Uni Freiburg

Working as a HiWi (Wissenschaftliche Hilfskräfte) on NASLib. Adding methods for NAS as a pruning approach to NASLib.

Computer Vision Group, Uni Freiburg

Working as a HiWi (Wissenschaftliche Hilfskräfte) on the DeTol Project. This work is an extension of my master's thesis. Here, we study the change in robustness and attempt to improve it as we prune down an ensemble of networks and scaled-up networks.

Chair of Nanotechnology, IMTEK, Uni Freiburg

Developed a software for Atomic Metal Deposition to automate the entire process of depositing metal atoms on a substrate, atom by atom, on intrinsic sites of the substrate. So that the researchers just have to press run and can later analyze the results after the entire process is done automatically.

Chair of Microelectronics, IMTEK, Uni Freiburg

Developing SPICY, a web-based application for students and teachers of electronics, especially microelectronics. This application can be used to better understand circuits and their working with various visualizations.

Edelweiss Tokio Life Insurance Company, Mumbai

Developed a project for Edelweiss Tokio Life Insurance Company to create an error log file for every error • which occurs on the online testing website to be hosted by the company. This project was implemented using C# on Microsoft Visual Studio.

Tata Business Support Services, Thane

Developed a project for Tata Business Support Services, Thane to manage their database and create an administrator to create and manage users of this application. I implemented this project using Java Servlets, HTML, CSS, MySQL, JDBC.

Extra-Curricular Achievements

- Volunteered at NGO Siddhant+ that helps aged and elderly people below the poverty line or who have no • one to look after them.
- Mentor to the new students at Uni Freiburg.
- International tutor and bar tutor at the University Campus dorms. •
- Taught English to underprivileged kids at a public school. •
- Was in the curation team of **TEDxVESIT** 2018.
- Senior Deputy Cultural Secretary in the Student Council 2016- 2017 of VESIT. .
- Executive Member of the Organising Committee of Praxis'16, annual technical fest of VESIT. .
- Won 1st prize in inter-college Drama competition: Manzar by ICT, Matunga. •
- Won 2nd prize in inter-college Drama competitions: Talaash'16 by Jai Hind, Utsav'16 by VESIT. •
- I love hiking and have hiked the Kalsubai (MH, India) (1646 m) and a few other peaks in the Himalayas.

June 2015 – July 2015

September 2021 - December 2021

May 2019 - April 2021

April 2020 - August 2020

December 2016 - January 2017

February 2022 - May 2022