## Krishnakant Singh

Education	<ul> <li>Department of Computer Science, TU Darmstadt</li> <li><i>Ph.D. in Computer Science</i></li> <li>Advisor: Prof. Stefan Roth</li> <li>Research area: Compositional generative modelling</li> </ul>	Darmstadt, Germany 2021-2026 (expected)
	<ul><li>Department of Computer Science, IIT Hyderabad</li><li><i>M.Tech in Computer Science</i></li><li>GPA: 9.2/10.0, Rank: In Top-5/30</li></ul>	Hyderabad, India 2015-2018
	<ul><li>Department of Computer Science, IIIT Sambalpur</li><li>B.Tech in Computer Science</li><li>GPA: 9.3/10.0, Rank: 1/38</li></ul>	Sambalpur, India 2011-2015
Experience	Research Scientist   Rakuten, Japan	Nov, 2019-Feb, 2021
	• Shipped complete the look recommendation for fashion items for Rakuten fashion.	
	• The model uses a BERT-like model by treating fashion rec problems as masked text modeling.	ommendation
	Research Engineer   Rakuten, Japan	Sep, 2018-Nov, 2019
	<ul> <li>Shipped shoot-and-shop feature for real-world fashion images.</li> <li>Modified Mask R-CNN models for working on real-world noisy fashion images.</li> </ul>	
	Summer Intern   MLPack, Google Summer of Code	Jun, 2017-Sep, 2017
	<ul> <li>Developed and merged machine learning algorithms like Spike-Slab RBMs, RBMs, and GAN into MLPack library.</li> </ul>	
	• The developed models beat efficiency benchmarks compared to the scikit- learn library.	
Publications	1. Krishnakant Singh, Simone Schaub-Meyer, Stefan Roth. Guided Latent Slot Diffusion for Object-Centric Learning. <i>Under Review</i> .	
	2. Krishnakant Singh, Simone Schaub-Meyer, Stefan Roth. Is Synthetic Data All We Need? Benchmarking the Robustness of Models Trained with Synthetic Images. <i>CVPR SyntaGen</i> <i>Workshop</i> , 2024. Best Paper Award	
	3. Krishnakant Singh, Simone Schaub-Meyer, Stefan Roth. S <sup>2</sup> -Flow Join semantic and style editing of facial images. <i>BMVC</i> , 2022.	
	4. K.J. Joseph, Vamshi Teja R., Krishnakant Singh, Vineeth N. Balasubramanian, Sub- modular Batch Selection for Training Deep Neural Networks. <i>IJCAI</i> , 2019 and <i>ICML</i> - <i>Workshop</i> , 2019.	
Awards	• Best Paper Award, SyntaGen Workshop, CVPR 2024.	
AND	Academic Excellence Award, Spark Fellowship.	
Honors	Academic Scholarship, IIT Hyderabad.	
Skills	Languages: English, Hindi, German(Basic). Programming: Python, C++, MATLAB.	

ACADEMICReviewer for: ICCV 2023, ECCV 2024, NeurIPS 2024.SERVICESTalks: EuroPython 2020: Link.