Rohit Kumar

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Timeline

KaggleX 3rd Cohort Mentee	08/2023 - 11/2023
Focused on reinforcement learning and open-source contributions under Mentor Shrinivasan Sankar	*KaggleX*

Conference Paper Reviewer	06/2023 - 09/2023
8th international conference on Computer Vision and Image Processing (CVIP) 2023	

Artificial Intelligence Software Developer, Captury GmbH	07/2021 – Now
Captury GmbH, Acquired by DARI Motion, USA	*Saarbrücken, Germany*

Ball Tracking : Leading the development of ball tracking AI algorithm.	09/2022 – Now
Low-resolution hand tracking : Led the development and integration of a deep learning-based hand tracking feature for low-resolution images, taking the project from dataset generation to final neural network implementation. Achieved a deployable ready version integrated into Captury Software in March 2022.	07/2021 – 03/2022, 10/2022 – Now
Python Bindings : Developed a Python library using Python-C APIs for Captury, enabling batch processing, server farm utilization, dataset generation, and efficient internal testing. The library is widely used both internally for in-house data generation (e.g., hand pose data) and by clients for processing large volumes of 3D-tracking data without UI or on server farms.	03/2022 – 06/2022
In-House Data Generation : Showcased extensive expertise in 3D simulation software, including Unreal Engine, Unity3D, Blender, and our own CapturyLive to create compelling Captury software demos and facilitate synthetic and real-world data generation. These contributions significantly bolstered Captury's market presence, successfully attracting new clients while strengthening our in-house data generation capabilities.	

Term Paper on Adaptation in cloud computing	01/2021 – 04/2021
Advisor: Prof. Naveen Sharma, Rochester Institute of Technology, New York, USA	*Github*

Deep Learning & Computer Vision Intern, Captury GmbH	10/2020 – 12/2020
Mentor: Dr. Nils Hasler (CTO) & Michal Ritcher (Sr. SW Dev.), Co-Founders	*Saarbrücken, Germany*
Developed a deep learning model with randomization of foreground (Humans) and backgrounds(COCO)	

Software Engineer Intern, Captury GmbH	05/2020 – 07/2020
Mentor: Dr. Nils Hasler, CTO, Cofounder	*Saarbrücken, Germany*
Worked on shape key prediction prediction using 3D characters from Reallusion, randomization of shape keys in blender and prediction using SVD. This project eventually led to a bigger project in Captury to solve the task using Deep Learning.	

Research Collaboration with National Institute of Informatics(NII), Japan	04/2020 – 03/2021
Advisors: Prof. Isao Echizen NII,Japan; Dr. Harkeerat Kaur, IIT Jammu	*NII Japan - IIT Jammu*

Publication: Reinforcement Learning based Smart Data Agent for Location Privacy
AINA'21 (Advanced Information Networking and Applications) Page(s): 657-671
Harkeerat Kaur; Rohit Kumar; Isao Echizen

Publication: Smart Data Agent for Preserving Location Privacy
IEEE-SSCI'20 (Symposium Series on Computational Intelligence) Page(s):2567 - 2575
Harkeerat Kaur; Isao Echizen; Rohit Kumar

Machine Learning Research Intern, IIT Bombay   05/2019 – 07/2019
Advisor: Prof. Virendra Singh, IIT Bombay   *Bombay, India*

Literature review of Object detection and deep learning methods for it.

BTech in Computer Science And Engineering   07/2017 – 05/2021
Indian Institute of Technology(IIT) Jammu, India   *CGPA: 7.4/10*

While studying at IIT Jammu, I honed my skills in AI through hands-on research
and development projects and enriched my knowledge through online courses from
renowned institutions like Stanford Online, MIT OCW, and Coursera. Additionally,
as Cultural Secretary, I effectively led a 30-member team to execute a successful 10-
day foundation program.

Prepared for JEE-ADVANCED Exam   04/2016 – 05/2017
Successfully prepared for and passed JEE-ADVANCED, the entrance exam to enter
IITs in India, with a rank of 6556.

Star Public School, Rajasthan, India   04/2015 – 03/2016
High school examination, CBSE Board, India   *85.67 / 100*

OTHER COURSES

Coursera Certificates : Computational Neuroscience by University of Washington; Synapse, Neuron and
Brain from Hebrew University; AI for Medicine Specialisation from DeepLearning.AI; Deep Learning
Specialisation from DeepLearning.AI; Reinforcement Learning Specialisation from University of Alberta