

ARPIT JADON

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Mecklenburging 1, Saarbrücken, Germany

in arpitjadonamu



SUMMARY

Computer Science Master's graduate (Visual Computing) from Saarland University and Max Planck Institute for Informatics with a prior industrial experience of around 1.5 years. Proven track record in Computer Vision, Medical Imaging, Autonomous Driving, Machine Learning, and Data Science. Seeking industrial roles like Machine Learning Engineer, Computer Vision Engineer, Data Scientist, and Data Engineer to leverage my skills in solving real-world problems.

EXPERIENCE

ML Engineer

Onward Assist

📅 July 2019 – October 2020 📍 Hyderabad, India

- Developed computer vision algorithms for real-time cancer diagnosis and prognosis - deployed these algorithms as end products.
- Worked on multiple data modalities - whole slide images, X-Rays, microscopic images (including multi-spectral), pharmacological data, etc.
- Majority of the projects were based on **digital pathology**.
- Supervised multiple interns for six-month periods on digital pathology and pharmacology-related projects.
- Worked with [Dr. Vikas Ramachandra](#) on most of these projects.

Research Assistant

Max Planck Institute for Informatics

📅 October 2021 – Ongoing 📍 Saarbrücken, Germany

- Developed an optimal source data subsampling method [*AdaptSampler*] for improved unsupervised domain adaptation (UDA) performance in autonomous driving applications.
- Collaborated with team at Parallel Domain 🤖 to Collect SynthDrive, a synthetic driving dataset that provides a major upgrade over existing datasets in terms of realism and diversity while comprising a comprehensive annotation set with multiple 2D and 3D modalities.
- Modified the Cityscapes annotation tool to lift the ACDC annotations (<https://acdc.vision.ee.ethz.ch/>) from semantic to instance segmentation. Demo: shorturl.at/ipRT5
- Worked with [Dr. Dengxin Dai](#) and [Lukas Hoyer](#) during these projects.

Research Assistant

German Research Center for AI

📅 July 2021 – September 2021 📍 Saarbrücken, Germany

- Proposing a generalized model transferable to different medical image modalities for improved performance on different vision tasks.
- The model was trained in a self-supervised way to learn representations for multi-modal images.

Other Product Based Project Experience

Independent Applied Research Projects

📅 2017 – 2019 📍 Aligarh, India

- Computer Vision Based Underwater Autonomous Surveillance System.

SKILLS

- **Concepts:** Computer Vision, Machine Learning, Deep Learning, Domain Adaptation for Computer Vision, Medical Image Analysis, Autonomous Driving, Data Acquisition, Sensor Interfacing, and Embedded Systems.
- **Programming:** Python, Matlab, Octave, and Beginner C/C++.
- **Frameworks & Tools:** PyTorch, TensorFlow, Keras, Git, Agile Scrum (Jira), Linux, Slurm, Confluence, NumPy, Flask, Pandas, OpenCV, Matplotlib, GCP, Azure, and \LaTeX .
- **Languages:** English (*near native*), Hindi (*native*), and German (*beginner*).

EDUCATION

M.S. in Computer Science

Saarland University and Max Planck Institute for Informatics

📅 November 2020 – April 2023

Coursework: Probabilistic Graphical Models & Applications, Neural Networks: Theory and Implementation, Optimization for Machine Learning, Human-Computer Interaction, Image Processing & Computer Vision, High-Level Computer Vision, Geometric Modeling, Computer Vision & ML for Computer Graphics

Thesis: Semantic Road Scene Understanding with Realistic Synthetic Data

B.S. in Electrical Engineering

ZHCET, AMU

📅 August 2015 – July 2019

Coursework: Introduction to AI, Mathematics I & II, Higher Mathematics, and Numerical Techniques.

Online Coursework

Machine Learning

- ◇ Underwater abnormal object detection and tracking.
- ◇ Efficient underwater image compression for faster data transmission via acoustic communication.
- **Lightweight Fire & Smoke Detection Model for Real-Time IoT Applications**
 - ◇ Deep learning based computer vision algorithm deployed to low-cost embedded systems. The product can differentiate between fire and smoke.

TECHNICAL REPORTS AND POSTERS

- Real-Time Mitosis Detection in Whole-Slide Breast Cancer Histopathology Images - <https://cutt.ly/obMZLEg>
- Contrast to Adapt: Noisy Label Learning with Contrastive Warm-up for Source-Free Unsupervised Domain Adaptation - <https://cutt.ly/PW9skR5>
- Improving Semantic Segmentation Performance using Conditional Random Fields - <https://cutt.ly/6bS2NQ4>

Deep Learning Specialization Courses
Embedded Systems & IoT Specialization
TensorFlow Deep Learning Courses
MATLAB Programming
AI For Medical Diagnosis
Certificates - <https://bit.ly/2ZMPyiR>

REFEREES

Dr. Dengxin Dai

@ Director of Research, Huawei Zurich
Research Center

✉ ddai@mpi-inf.mpg.de

Dr. Vikas Ramachandra

@ CTO, Onward Assist

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