Aniket Dhar

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SUMMARY

Senior Computer Vision Engineer with 5+ years of experience in algorithm development for AD / ADAS technologies and a strong background in C++ software development. Proven leadership as a Product Owner and Deputy Team Lead, managing technical teams and delivering high-impact projects. Skilled in Python, C++17, and deeplearning, with hands-on experience in PyTorch and Keras. Experienced in working with cross-cultural and cross-functional teams in different capacities in multiple countries.

EXPERIENCE

Senior Computer Vision Engineer, Denso ADAS Engineering Services | Germany | Jul 2024 - Present

Decentralized Localization in HD map – DekorX (2023 - present)

- Developed an instance segmentation model to detect static landmarks in urban environments
- As a Deputy Product Owner, supported in project planning, task assignments, and stakeholder communication
- Helped setup MLOps pipeline for data curation and experiment tracking for computer vision teams

Computer Vision Engineer, Denso ADAS Engineering Services | Germany | Nov 2019 - Jun 2024

Road Geometry Estimation (2022–2023)

- Led a small technical team as a Product Owner, coordinated with stakeholders, and made key technical decisions, ensuring project alignment and success
- Achieved <10 cm height error in mapping road height profiles using a monocular depth estimation algorithm
- Implemented a validation tool to evaluate algorithm performance, enhancing accuracy and reliability

Camera Based Localization (2021–2022)

- Ported a particle filter based localization algorithm from LiDAR to a 360° multi-camera system
- Improved resampling method and synchronized input depth map handling, improving filter performance and reducing processing time and frame-drops
- Developed a ROS2 pipeline by wrapping the C++17 algorithm into ROS2 nodes, enabling seamless real-time operation in test vehicle environment (~25 FPS)

3DVP – 360° visual perception for parking assist (2019–2021)

- Integrated depth-maps from multiple monocular cameras into a multi-level 3D gridmap and developed a corresponding 2D occupancy map using C++14
- Implemented plane estimation algorithms to accurately detect and optimize ramps and slopes on the 2D occupancy map, improving system reliability
- Designed and developed a generic C++14 based validation framework, defining and validating KPIs for the mapping module

Software Engineer, TOPIC Embedded Systems | The Netherlands | Mar 2019 - Sep 2019

Topic Healthcare Systems

- Design a model to predict the stage of a surgical operation procedure with the aim of improving operation scheduling in hospitals

Graduate Research Intern, CIV Rijkswaterstaat | The Netherlands | Mar 2018 - Nov 2018

Automation of municipal land records

- Developed a semantic segmentation model for land classification from aerial and satellite imagery to automate municipality land records

Student Intern, Airbus Defense & Space | Germany | Aug 2017 - Jan 2018

Post Action Monitoring PoC

- Improved a AR application in Hololens using C# and Unity for post-action monitoring

Software Engineer, Samsung R&D Institute | India | Jul 2013 - Jul 2016

MagicInfo Multimedia Player

- Worked on a C++ framework for a multimedia playback platform for large format display, ensuring robust and reliable software solutions
- Developed software modules for image, stickers, and weather widget objects
- Optimized, safe, and memory-efficient software for deployment on a Linux SoC, improving system performance

EDUCATION

Technische Universiteit Delft 2016 - 2018

MSc in Embedded Systems (Software & Networking)
Focus: Computer Vision, Deep Learning • CGPA: 7.22/10.00
Thesis: "Rotation invariant filters in CNN: applied to segmentation of aerial images for land-use classification"

National Institute of Technology Agartala 2009 - 2013

Bachelor of Technology in Electronics & Communication
Focus: Embedded System • CGPA: 9.08/10.00

CERTIFICATIONS

Machine Learning • *TestDome* Apr 2025

PyTorch for Deep Learning Bootcamp • *Udemy* Apr 2024

ROS2 For Beginners (ROS Foxy - 2022) • *Udemy* Jan 2022

C++ • *TestDome* Jan 2019

SKILLS

Technical : Python • C++17 • PyTorch • Keras • MATLAB • Git • ROS2 • OpenCV • Eigen • Weights&Biases • Voxel51 • Bamboo • Docker • Jenkins • CMake • Conan • ONNX • SLAM

Language : German - Conversational | English - Fluent | Hindi - Fluent | Bengali - Mother Tongue