Personal information

Surname / First name	**Iyer Venkatesh R**
Address	Uhlandstraße 8, Braunschweig 38102
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Professional Email	iyervenkatesh92@gmail.com
Nationality	Indian
Date of birth	3 June 1992
Gender	Male
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GitHub	https://github.com/venkyiyer

Work experience

Oct 2020 - present — **Researcher, Institute of Flight Guidance, German Aerospace Center (DLR), Braunschweig**

Part of research project NICO: Applying Machine learning methods for data preparation and visualization of large and heterogeneous flight management system datasets

Nov 2019 - Jul 2020 — **Student assistant, MindGarage (TU Kaiserslautern)**

Assisting students regarding Deep learning course, master projects and thesis. Hardware and software maintenance of lab

Oct 2018 - Jun 2019 — **Student assistant, Department of Cognitive and Developmental Psychology (TU Kaiserslautern)**

Designed and developed three world-wide known psychometric test procedures (flanker test, mental rotation and n-back) for usage in mobile device

Jul 2014 - Aug 2016 — **Associate software developer, Ernst & Young (EY), Bengaluru, India**

Designed, developed and supported live applications using Microsoft SharePoint. Lead team size of four (consultants) for J.P Morgan Chase to manage internal audit (Sarbanes-Oxley Act) data on Microsoft SharePoint

Jun 2013 - Jun 2014 — **Software engineering intern, Leon's Integrations, Vadodara, India**

Developed the account and taxation modules which were integrated in the Enterprise Resource Planning (ERP) business management software

Education

Oct 2016 - Aug 2020 — **Technische Universität Kaiserslautern, Germany**

Title of qualification awarded: M.Sc. in Computer Science (Artificial Intelligence), Result obtained: 2.6/4

Key courses	Deep learning, Applications of AI, Computer vision, Machine learning, Embedded intelligence, Biologically motivated robots
Jun 2010 - Jun 2014	**Gujarat Technological University, India**
Title of qualification awarded	B.Tech. in Computer Science, Result obtained: 7.5/10
Key courses	Operating systems, Data structure and algorithms, Compilers, AI, Computer graphics

Research experience

Apr 2020 - May 2020	**In-house project, Cancer nuclei segmentation** Explored traditional Computer Vision and Deep Learning (UNet) for cell segmentation. Work based on data-set borrowed from 2018 Data Science Bowl Competition
Jun 2019 - Jan 2020	**Master thesis, Semantic segmentation and object detection using a common pipeline** Designed and implemented a combined multi-task architecture to learn computer vision problems semantic segmentation and object detection in parallel. This architecture uses a shared encoder and hence reducing the number of trainable parameters to a half. Real-time usage with an autonomous robot in progress.
Oct 2018 - Mar 2019	**Master project, Semantic segmentation and object detection using OpenCV library** Implemented semantic segmentation architecture using city dataset. Using OpenCV, detected objects on the segmented map. Lastly, classified each object using a classification network
Oct 2017 - Feb 2018	**In-house project, Classifying political affiliation based on Twitter posts** Using tweets, classified German politicians within their party. Used pre-trained NLP technique Word2Vec. Data-set from seven major political parties in Germany

Skills

APIs, libraries, frameworks	TensorFlow, Keras, NumPy, SciPy, Scikit-learn, Pandas, Jupyter Notebooks, OpenCV, HTML/CSS, Flask, Docker
Programming languages	Python, C++, JavaScript
Databases	Oracle, DB2, MySQL
Scrum	Jira
Version Control	Git

Additional information

Languages	English (fluent), German (basic), Tamil (mother tongue)
Hobbies	Playing computer games, listening music, playing football
Other courses	Convolution Neural Networks for Visual Recognition (CS231n) Machine Learning (CS229)
Trainings	Machine Learning course by Stanford University (Coursera) Sequence models for natural language and audio (Coursera) SharePoint and SharePoint Designer 2010, 2013

References available upon request