

# Manu Somasagar Kamalakar

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Date of birth: 24/12/1994 | **Nationality:** Indian | **Gender:** Male | (+49) 17687919090 | (+91) 7411422605 | [kamalaka@rhrk.uni-kl.de](mailto:kamalaka@rhrk.uni-kl.de) | <https://manu-sk.github.io/> | <https://www.linkedin.com/in/manu-s-k-1b373ba2/> |

Hegelstraße 30, wohnung 22, 67663, Kaiserslautern, Germany

About me:

I am a Machine Learning enthusiast working as a research engineer at Fraunhofer ITWM. I studied MSc. Computer Science at TU Kaiserslautern, Germany.

## ● WORK EXPERIENCE

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01/10/2021 – CURRENT – Kaiserslautern, Germany

**RESEARCH ENGINEER – FRAUNHOFER INSTITUTE FOR INDUSTRIAL MATHEMATICS (ITWM)**

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- Working with Porsche to build machine learning solutions to solve business problems
- Doing research on Anomaly detection techniques on unsupervised data

01/01/2020 – 30/09/2021 – Kaiserslautern, Germany

**SCIENTIFIC STUDENT ASSISTANT – FRAUNHOFER INSTITUTE FOR INDUSTRIAL MATHEMATICS (ITWM)**

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- Worked on federated machine learning by conducting experiments with various state-of-the-art datasets using federated machine learning frameworks such as PyTorch and Tensorflow Federated.
- Worked as a part of the team to build a novel federated learning framework and a working MVP.
- Implemented FedProx weight aggregation method for federated learning.

24/08/2017 – 09/08/2019 – Bengaluru, India

**SOFTWARE ENGINEER – DEVOPS – SOCIETE GENERALE GLOBAL SOLUTION CENTRE**

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- Developed a python-flask application to automatically migrate the SVN source code repository to GITHUB.
- Worked as a part of the DevOps transformation team to coach project teams about DevOps culture.
- Implemented CI-CD pipelines for project teams.
- Written scripts to deploy the applications to AWS and Openshift.

03/04/2017 – 23/08/2017 – Bengaluru, India

**YOUNG GRADUATE – SOCIETE GENERALE GLOBAL SOLUTION CENTRE**

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- Developed an ML-based chatbot using TensorFlow.
- Worked as a test engineer. Have used tools such as Selenium and UFT to automate the testing process.

02/08/2016 – 24/03/2017 – Bengaluru, India

**TRAINEE - FULL STACK DEVELOPER – RANTYASOFT PVT LTD.**

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- Worked as a developer to build practice management software

## ● EDUCATION AND TRAINING

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01/10/2019 – 30/09/2021 – Erwin-Schrödinger-Straße 1, Kaiserslautern, Germany

**MSC. COMPUTER SCIENCE** – TU Kaiserslautern

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Specialization-1: Intelligent Systems (AI), Specialization-2: Software Engineering

Thesis: Federated Machine Learning for Fraud Detection

Project: Deep Digit Recognition

Seminar: Photorealistic fakes with Generative Adversarial Networks

01/08/2012 – 01/08/2016 – Bangalore, India

**BACHELOR OF ENGINEERING IN COMPUTER SCIENCE & ENGINEERING** – K.S. Institute of Technology

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Grade: 75.24% (Distinction)

Project: A Data Mapping Strategy for Parallel Data Mining Nodes in Grid connected to a Storage Cloud.

01/06/2007 – 01/06/2010 – Sirsi, India

**SECONDARY SCHOOL LEAVING CERTIFICATE** – Shree Marikamba High School

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Grade: 93.44% (Distinction)

## ● LANGUAGE SKILLS

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Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
<b>ENGLISH</b>	C1	C1	C1	C1	C1
<b>GERMAN</b>	A2	A2	A2	A2	A2

*Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user*

## ● RECOMMENDATIONS

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Dr. Stefanie Grimm – Product Manager "Data Science" – [stefanie.grimm@itwm.fraunhofer.de](mailto:stefanie.grimm@itwm.fraunhofer.de)

Method coordinator "Data Science"

Nivarty Jayaram – Vice President, Societe Generale. – [kaustubhasai@gmail.com](mailto:kaustubhasai@gmail.com)

Personal Website: [nivartijayaram.com](http://nivartijayaram.com)

Dr. Stefanie Schwaar – Business Unit Developer – [stefanie.schwaar@itwm.fraunhofer.de](mailto:stefanie.schwaar@itwm.fraunhofer.de)

Business Unit Developer

## ● **COMMUNICATION AND INTERPERSONAL SKILLS**

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### **Communication and interpersonal skills**

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- Excellent contact and communication skills gained through my experience as a DevOps engineer.
- I was a member of techno-cultural college fest organizing committee.
- I was an event coordinator for IEEE Bangalore Section.
- I was a member of college Google Developer Group.
- Good at creating and keeping deadlines.
- I set short-term and long-term goals and work hard to accomplish them.
- I have good decision making, problem-solving skills.
- I am confident, multitasking, and a team player with fast learning skill.

## ● **SKILLS**

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### **Job-related and Technical skills**

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- Machine Learning: Pytorch, Tensorflow, Scikit-learn, Numpy, and Pandas.
- Development Tools & Platforms: Anaconda, Pycharm, Eclipse, Android Studio, Visual Studio.
- Technical Skills: Python, Machine Learning, Deep Learning, Computer Vision.
- DevOps Tools: Git, Jenkins, Nexus, Ansible, and Docker.
- Cloud: AWS, Openshift.
- Databases: MySQL, Postgres.
- Operating Systems: Linux, Ubuntu, Windows, Kali-Linux.

## ● **CERTIFICATIONS AND CONFERENCES**

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### **Certifications and Conferences**

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- Oracle Certified Professional, Java SE 6 Programmer
- IELTS (Band 7)
- All India DevOps Conference conducted by the DevOps Institute.
- Proposed a topic "Marrying Machine Learning with DevOps" for agile-day 2019 Washington DC.