Geevarghese George, PhD

Graz, Austria | LinkedIn | GitHub

SUMMARY

- Self-starter and fast learner: Driven and proactive with a strong passion for AI and its emerging applications, especially in human-centred scenarios.
- Curiosity for new technologies: Keen interest in exploring and keeping up-to-date with the latest advancements in the field, constantly seeking opportunities to leverage emerging technologies.
- Effective communicator: Proficient in delivering compelling presentations, communicating complex ideas and conveying messages clearly to technical and non-technical audiences.

SKILLS

Domains: Time Series, Computer Vision, Machine Learning, Radiomics, Feature Selection, Classification, Segmentation, Hyperparameter Tuning, Multi-Objective Optimization, Data Analysis, MD Simulations

Frameworks: PyTorch, Lightning, fastai, TensorFlow, scikit-learn, Optuna, LAMMPS, Git, Docker, PySpark

Languages: Python, C/C++, Bash scripting, LATEX, R, MATLAB/Octave, SQL

Other tools: Vim, VSCode, Jupyter, and *nix operating systems.

EXPERIENCE

Data Scientist 01/2024-Present

Data Intelligence & Digital Services (Engineering),

AVL List GmbH, Graz, Austria

- Implemented surrogate-model based optimization (SMBO) algorithms for a major OEM, resulting in significant improvements in key vehicle performance metrics.
- Contributing to the development of a collaborative data space for large-scale EU R&D initiative with 47 industrial partners, enabling efficient data sharing and analysis across the consortium.
- Proactively supporting the data intelligence department in HR initiatives and sales activities (e.g., recruitment, proposal development, client presentations).

Machine Learning Researcher

05/2022-12/2023

Medical Image Analysis & Artificial Intelligence (MIAAI) Research Center, Danube Private University, Krems, Austria

- Designed, developed, and maintained an in-house ML library for feature selection and ablation studies, resulting in the publication of 3+ highly collaborative research papers and conference posters.
- Actively collaborated with interns, providing guidance and technical support to develop state-of-the-art 3D deep learning architectures.
- Trained medical students in utilizing large language models and retrieval augmented generation for efficient literature reviews.

EDUCATION

Doctor of Philosophy in Computational Physics

10/2017-06/2021

Theory and Simulation of Polymers (ETSP) Group

Institut Charles Sadron (ICS, CNRS) & University of Strasbourg, France

Topics: Molecular modeling, polymer physics, non-ergodic systems.

Master of Science in Polymer Science, Computational Physics

09/2015-09/2017

University of Freiburg, Germany

(Erasmus+) University of Strasbourg, France

Bachelor of Technology in Polymer Science & Engineering Cochin University of Science and Technology, India

07/2010-07/2014

ML PUBLICATIONS

- AI-based Time-Intensity-Curve assessment of breast tumors on MRI. O. Zaric, S. Hatamikia, G. George, F. Schwarzhans, S. Trattnig, R. Woitek. Eur. Radiol. (2024). doi: 10.1007/s00330-023-10298-8.
- Machine learning based contrast-enhancement and IDH status prediction of gliomas using 7T MR spectroscopic imaging. F. Schwarzhans (Presenting), G. George, et. al. Presented at Neuro-Oncology: Applications of Artificial Intelligence on Gliomas, ISMRM Singapore 2024.
- Breast MRI radiomics and machine learning radiomics-based predictions of response to neoadjuvant chemotherapy. S. Hatamikia, **G. George**, F. Schwarzhans, A. Mahbod, R. Woitek. *Comput. Struct. Biotechnol. J.* (2023). doi: 10.1016/j.csbj.2023.11.016.

Full list of research publications: Google Scholar

LANGUAGES

German (Sprachlehrinstitut Freiburg 2016 A2.2) French (Test de Français International 2020 B1) English (TOEFL 2014 C2) Malayalam (Native)

EXTRA-CURRICULAR

Reviewer: Cancer Imaging Runner-up, Concours artistique (Art in science contest)—ICS (2020) Winner, Ma these en 180s—ICS edition (2019) Photographer for doctoral school (EDPCP, UniStra) events (2017, 2018) International student tutor (Studententutor), SWFR Freiburg (2016)

VISA STATUS

Nationality: Indian Visa/Work permit (Austria): RWR Karte+