Curriculum vitae with track record (for researchers)

Role in the project   Project manager ☐   Project participant ☒

Personal information

First name, Surname:	Karthik Shivashankar

Date of birth:	13-06-1994	Sex:	Male

Nationality:	Indian
Researcher unique identifier(s) (ORCID, ResearcherID, etc.):	0009-0001-8508-2978
URL for personal website:	https://www.linkedin.com/in/karthiksankarprofile

Education

Year	Faculty/department - University/institution - Country
2025 (To defend in fall)	Ph.D. Department of Informatics, University of Oslo, Norway
2019	MSc Electronic Engineering, University of Surrey, UK

Positions - current and previous

Year	Job title – Employer - Country
2021-current	Ph.D. Department of Informatics, University of Oslo, Norway
2018 - 2021	AI Engineer, Fantastec Sports Technologies, London, UK

Supervision of students

Master's students	Ph.D. students	University/institution - Country
11		University of Oslo, Norway

Track record

Publications

- Shivashankar, K., & Martini, A. (2022). Maintainability challenges in ML: A systematic literature review. 2022 48th Euromicro Conference on Software Engineering and Advanced Applications (SEAA)

- Skryseth, D., Shivashankar, K., Pilán, I., & Martini, A. (2023). Technical debt classification in issue trackers using natural language processing based on transformers. 2023 ACM/IEEE International Conference on Technical Debt (TechDebt), 92-101.

- Shivashankar, K., & Bakthavatchaalam, V. (2024). Education policies through data-driven decision-making: Accelerating inclusive education for people with disabilities. Artificial Intelligence Enabled Management, 15-32. *Transforming Healthcare Sector Through Artificial Intelligence and Environmental Sustainability*, pp.253-274

- Shivashankar, K., & Martini, A. (2024). Better Python Programming for all: With the focus on Maintainability. arXiv preprint arXiv:2408.09134.

- Shivashankar, K., & Bakthavatchaalam, V. (2021). Smart Municipal Governance System Using Confluence of Technologies in a Developing Country Scenario. In *Proceedings of the 14th International Conference on Theory and Practice of Electronic Governance* (pp. 535-537).

- Shivashankar, K., Orucevic, M., Kruke, MM, & Martini, A. (2024). Beacon-Td: Classifying Technical Debt and its Types Across Diverse Software Projects Issues Using Transformers. Available at SSRN 4945055.

- Shivashankar, K., & Martini, A. (2025). PyExamine A Comprehensive, UnOpinionated Smell Detection Tool for Python, *Proceedings of the 22nd Mining Software Repositories (MSR)*, 2025

- Bakthavatchaalam, V., & Sivasankar, K. (2025). AI in healthcare education: a systematic review of applications in teaching and learning. *Transforming Healthcare Sector Through Artificial Intelligence and Environmental Sustainability*, 253-274.

- Haugerud, KM, Shivashankar, K., & Martini, A. (2025). Towards Enhancing Task Prioritization in Software Development Through Transformer-Based Issues Classification. International Conference on Product-Focused Software Process Improvement, PROFES 2025

- Shivashankar, K., & Martini, A. (2025). MLScent: A tool for Anti-pattern detection in ML projects. Proceedings of the 4th International Conference on AI Engineering, CAIN 2025.

Software Packages

- **Python smells detector:** https://github.com/KarthikShivasankar/python_smells_detector
- **ML smells detector:** https://github.com/KarthikShivasankar/ml_smells_detector

Datasets

- https://huggingface.co/datasets/karths/binary-10IQR-TD
- https://huggingface.co/datasets/karths/Ilities-without-keywords-unique-all-filter