Amir Sartipi

📱 (+352) 661 854 135 | ✉ amir.sartipi@uni.lu | in linkedin.com/in/amir-sartipi-b0659b17a/ | 🎓 Amir Sartipi

Education

University of Luxembourg, SnT   *Kirchberg, Luxembourg*
PhD in Computer Science   *July 2024 - Current*
- **Thesis:** TBD

University of Isfahan   *Isfahan, Iran*
MSc in Software Engineering   *Sept 2020 - Sept 2023*
- **Thesis:** 'Multilingual Complex Named Entity Recognition'

University of Isfahan   *Isfahan, Iran*
BSc in Software Engineering   *Sept 2016 - Aug 2020*
- **Thesis:** 'Design and implementation of news monitoring system'

Publication

- **Amir Sartipi**, Amirreza Sedighin, Afsaneh Fatemi, and Hamidreza Baradaran Kashani. 2023. Sartipisedighin at semeval-2023 task 2: Fine-grained named entity recognition with pre-trained contextual language models and data augmentation from wikipedia. In *Proceedings of the 17th International Workshop on Semantic Evaluation*, pages 565–579, Toronto, Canada. Association for Computational Linguistics.
- **A. Sartipi** and A. Fatemi, "Exploring the Potential of Machine Translation for Generating Named Entity Datasets: A Case Study between Persian and English," *2023 9th International Conference on Web Research (ICWR)*, Tehran, Iran, Islamic Republic of, 2023, pp. 368-372, doi: 10.1109/ICWR57742.2023.10139222.
- Safayani, M., **Sartipi, A.**, Ahmadi, A. H., Jalali, P., Mansouri, A. H., Bisheh-Niasar, M., & Pourbahman, Z. (2023). OPSD: an Offensive Persian Social media Dataset and its baseline evaluations.
- **Sartipi, A.**, Dehghan, M., & Fatemi, A. (2023). An Evaluation of Persian-English Machine Translation Datasets with Transformers.

Skills

NLP	Prompt engineering, LangChain, LLMs, Complex reasoning in NLP, Chain of Thought, Gradio, Transformers
Artificial Intelligence	Python (Pandas, PyTorch (Geometric, Lightning), NumPy, Tensorflow, Keras, scikit-learn, pyspark, Apache Spark, wandb)
Web Development	Django Rest Framework, Django, Angular, Angular Material, Angular JS, jQuery, Bootstrap, Materialize
IDE	Visual Studio Code, PyCharm, Spyder, Google Colab
Miscellaneous	Linux, LaTeX(Overleaf/), Git, Docker, Elasticsearch, Kibana, k9s.
Soft Skills	Time Management, Teamwork, Problem-solving
Interests	Applied AI, Natural Language Processing, Deep Learning, Machine Learning, Data Scientist, Large Language Models

Work Experience

Neuroship   *Netherlands (Remote)*
NLP Engineer   *May 2023 - Feb 2024*
- Designed and developed an Enterprise Coding Assistant.
- Collaborated on projects involving Large Language Models.
- Implemented a summarization system for git repositories using Large Language Models (LLMs).
- Utilized open source LLMs, OpenAI, and VertexAI, to enhance project capabilities.
- Facilitated semantic interaction between vector databases and Large Language Models.
- Deployed Large Language Models on Google Cloud Platform (GCP).
- Developed diverse agents to work towards common goals.
- Gained experience working with helm charts, Kubernetes (k8s), and k9s.
- Created FastAPI applications to interact with agents.

Viravirast   *Remote*
NLP Engineer   *Aug 2022 - Mar 2024*
- Implemented a paraphrase generation system using generative models.
- Developed a grammar error detection application using transformers.
- Implemented a punctuation suggestion system.
- Built a grammar error correction system using a combination of ElasticSearch and transformer fill-mask techniques.
- Implemented automatic parallelization for unaligned data.
- Deploying language models in production.
- Processed massive amounts of data using Spark.

University of Isfahan *Isfahan, Iran*

Teaching Assistance *Sept 2020 - Aug 2022*

- Regularly assisted in tutoring, project and assignment preparation, and assessment

Isfahan University of Technology *Isfahan, Iran*

NLP Researcher and Developer *Apr 2020 - Sept 2020*

- Collaborated with a team of four to develop a model for detecting offensive comments.
- Fine-tuned state-of-the-art language models such as BERT, DeBERTa, mT5, and attention-based models for the task.
- Crawled data, labeled comments, and created datasets for detecting offensive comments.
- Applied NLP techniques such as data augmentation and active learning to improve the model's robustness.
- Deployed the models as an API.

Isfahan University of Technology *Isfahan, Iran*

Full-stack Web Developer *Jun 2020 - Mar 2021*

- Developed REST APIs and encapsulated all features as services.
- Developed a user interface and improved the user experience.
- Monitored the APIs using frameworks such as Elastic and Kibana.
- Handled HTTP requests using Kubernetes.

Freelance Projects *Isfahan and Tehran, Iran*

Full-stack Web Developer *May 2018 - May 2020*

- **Plasco:** Developed APIs for managing industrial workshops.
- **Bringo:** Designed and developed a web application for integrating online pharmacies.
- **Cubeh:** Designed and developed a web application for receiving customer orders to purchase products.
- **Rayo:** Developed an online reservation system for clinic patients.
- **Rayo:** Designed and developed a mentoring project.

Achievements

2023	**Lecturer for the University of Isfahan**, Annual Research Week Talk about Complex Few-shot Reasoning with LLMs	*Iran*
2023	**Contributor**, amazon/MistralLite model, huggingface repository	*Online*
2022	**8th out of 647 teams**, Data Science Cup 2022	*Amirkabir University Technology, Iran*
2021	**Lecturer for the University of Isfahan**, Annual Research Week (Graph Machine Learning)	*Iran*
2021	**1st out of 72 teams**, Nation contest in artificial intelligence	*Isfahan University of Technology, Iran*

Certificate

Offered by DeepLearning.AI, Coursera	Build Basic Generative Adversarial Networks
Stanford University	CS224W: Machine Learning with Graphs
Stanford University	Stanford CS224N: NLP with Deep Learning
Offered by Google, Coursera	Foundations: Data, Data, Everywhere
Udemy	TensorFlow Developer Certificate in 2021 Zero to Mastery
Udemy	Machine Learning A-Z™ Hands-On Python and R in Data Science

References available upon request.