Mesut Şafak Bilici

Email: m.safak.bilici@gmail.com

Date Of Birth: 08/1999
Address: Sariyer, Istanbul/Turkey
Website: safakkbilici.github.io
Github: github.com/safakkbilici
LinkedIn: linkedin.com/in/msafakbilici

Mobile: +90-553-385-3245

EDUCATION

- **Yildiz Technical University** — Istanbul, Turkey
Bachelor of Science - Computer Engineering; GPA: 3.48/4.00 — *July 2017 - June 2022*
Graduation Thesis: *Deep Multimodal Learning with Vision-and-Language Transformers*

EXPERIENCE

- **Research Engineer at Huawei**
Full-time — *Feb 2022 - Present*
  - Part of the AppGallery Search NLP Team.
  - Developed the vector based semantic search system of the AppGallery.
  - Implemented Arabic, Spanish and Russian spelling correction modules for search engines.

- **Machine Learning Researcher at YTU NOVA Lab.**
Full-time — *Dec 2020 - Feb 2022*
  - Research lab under the supervision of Assoc. Prof. Dr. Mehmet Fatih Amasyali.
  - Research on intersection of Variational Inference and Low-Resource Language Models.

- **Natural Language Processing Engineer at Artiwise**
Part-time — *June 2021 - Sep 2021*
  - Worked on dialogue act classification and emotion recognition for conversational systems.
  - Implemented Aspect Based Sentiment Analysis models for advanced customer review analytics.

- **Data Science Intern at Scoutium**
Internship — *July 2020 - Sep 2020*
  - Integrated data processing scripts for football analytics with Python.
  - Created a Python package for REST API integration with AWS S3 pipeline.
  - Big data management with MySQL and AWS Environments.

OPEN SOURCE PROJECTS

- **x-tagger**: A Natural Language Processing toolkit for part of speech tagging and named entity recognition with various computational linguistics and deep learning methods.
- **bayesmedaug**: A Python library that optimizes your data augmentation hyperparameters for medical image segmentation tasks by using Gaussian Process and Bayesian Optimization.

SKILLS SUMMARY

- **Academic**: Natural Language Processing, Bayesian Machine Learning, Data Science, Computer Vision.
- **Languages**: Python, C/C++, R, Java, Haskell, Shell, Tableau.
- **Frameworks**: PyTorch, Tensorflow, JAX/FLAX, SpaCy, NLTK, Scikit
- **Tools**: Docker, GIT, PostgreSQL, PL/pgSQL, MySQL, Tableau.
- **Platforms**: Linux, AWS S3, AWS Athena.
- **Soft Skills**: Leadership, Event Management, Writing, Public Speaking, Time Management.

VOLUNTEER EXPERIENCE

- **AI Program Specialist at inzva**
Volunteer — *Aug 2021 - Present*
  - Part of the team that organizes the syllabus of the AI programs.
  - Technical mentoring for the project groups.
  - GPU server administration.

- **Guide at Google Developers Machine Learning Bootcamp**
Volunteer — *July 2022 - Dec 2022*
  - Guidance for 2 weeks of 12-weeks-long advanced Deep Learning study group. Covered topics: word embeddings, sequential models, neural machine translation.

Publications

- **M. Şafak Bilici**, Mehmet Fatih Amasyali. "Transformers as Neural Augmentors: Class Conditional Sentence Generation via Variational Bayes", 2022. arXiv: 2205.09391 (in the process of acceptance decision).

- E. Sadi Uysal, **M. Şafak Bilici**, B. Selin Zaza, M. Yiğit Özgenç, Onur Boyar, "Exploring The Limits Of Data Augmentation For Retinal Vessel Segmentation", 2021. arXiv: 2105.09365.

- **M. Şafak Bilici**, Mehmet Fatih Amasyali. "Variational Sentence Augmentation For Masked Language Modeling" in Innovations in Intelligent Systems and Applications Conference