# HOVHANNES TAMOYAN

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### **EDUCATION**

### PhD STUDENT in COMPUTER SCIENCE

TU Darmstadt / UKP Lab

2023 - Present

Research Areas: NLP, LLM Evaluation, Code Generation Supervisor: Prof. Iryna Gurevych, Prof. Eduard Hovy

#### M.Sc. in COMPUTER SCIENCE

American University of Armenia 2019 - 2021

Thesis: Bilingual Sentence Alignment Using Multilingual Language Models Supervisor: Karen Hambardzumyan GPA: 3.77

### M.Sc. in NUCLEAR PHYSICS

Yerevan State University 2019 - 2021

Thesis: **Optimisation of Nonlinear Dynamics in CANDLE Storage Ring Supervisor: Prof. Vasili Tsakanov** GPA: 3.40

### **B.Sc. in NUCLEAR PHYSICS PHYSICS**

Yerevan State University

2015 - 2019

Thesis: **The Emittance Measurement of Electron Beam for AREAL Supervisor: Prof. Vasili Tsakanov** GPA: 4.00

## **TEACHING EXPERIENCE**

### **TEACHING ASSISTANT**

Instituto Superior Técnico - LxMLS 2023 2023

- Wrote the lab guide for the Transformers Day
- Guided researchers, graduate students, and industry practitioners for Lab sSessions

### TEACHING ASSOCIATE

American University of Armenia 2021

- Deep Learning
- Data Structures and Algorithms

# RESEARCH EXPERIENCE

### MACHINE LEARNING RESEARCHER

YerevaNN

2020 - 2023

- Multi-Modal (text, image) models CM3Leon
- Diffusion and Mixture of Expert Models for NAG
- Molecular representation learning BARTSmiles
- Cross-Lingual Zero-Shot transfer using prompt-based learning
- Bilingual Sentence Alignment problems in low-resource setups
- NMT for the WMT20 Biomedical translation task
- Created a Parallel Sentence Preprocessing toolkit parasite

### PHYSICS RESEARCHER

CANDLE SRI

2018 - 2020

- Electron beam Emittance measurement on the AREAL linac
- Introduced comprehensive functionality for Beam Diagnostics

# ENGINEERING EXPERIENCE

### MACHINE LEARNING ENGINEER

AimStack

2022 - 2023

- Integrated Aim with ML Frameworks and MLOps tools
- Enhanced the Back-End functionality

#### MACHINE LEARNING ENGINEER

ZERØ

2021 - 2022

• Researched on Multiclass Document classification

#### SENIOR SOFTWARE ENGINEER

Birthright Armenia 2018 - 2022

- Developed a large-scale CMS system
- Built an Email Management System
- Security Improvements for the system

### SKILLS

Programming Machine Learning

Database Systems Operating Systems Python, JavaScript, C PyTorch, TensorFlow, FairSeq, AllenNLP, PyTorch Lightning, HF Transformers SQL, NoSQL, GraphQL UNIX/Linux (Debian, Kali Linux)