

Sissy Themeli

+30 6993997357
+302106448920
c.themeli@gmail.com

Experienced Software Engineer, always keen in learning new technologies and improving her skills, currently working as a Senior Machine Learning and Software Engineer at Linked Business S.A. Sissy has worked as a researcher at NCSR Demokritos in the areas of Deep Learning and e-infrastructures, developing software for argument mining and an e-science platform for executing experiments, which hide infrastructure complexity from domain scientists (e.g. seismologists). Moreover, she has experience as a Backend Software Engineer in industry, building web services and RESTful APIs as well as dialog management systems for Omni-Channel Natural Language Interactions. Regarding her academic qualifications, she holds a M.Sc. in Computer Science with specialization in Machine Learning / Natural Language Processing from the University of Athens and a B.Sc. in Management Science and Technology from the Athens University of Economics and Business.

Professional Experience

April 2021 – today **Senior ML & Software Engineer | Team Leader**, *Linked Business SA*, Athens.

- Intelligent Data Matching Team Leader on various ML and Data Mining projects (e.g. company name matching)
- Agile management (OKRs, sprints etc)
- Redesign and implementation of the core company services to follow the Microservices Architecture
- Tech stack: RESTful APIs (FastAPI, Django), RabbitMQ, async tasks (celery, django-q), python and ML libraries, Docker, Kubernetes, Airflow, GitLab CI/CD, AWS, MongoDB, MySQL

September 2019 – **Research Associate**, *NCSR Demokritos*, Athens.

- E-science platform providing workflows-as-a-service using Django and Flask frameworks, enabling domain developers (seismologists, physicists etc) to execute their experiments by hiding infrastructure complexities.
- Implementation of an Argument Mining system using BERT-based models.
- *Technologies used*: Huggingface transformers, PyTorch, flairNLP, Django, Flask, FastAPI, Kubernetes, Docker, Elasticsearch, etc.

August 2018 – August 2019 **Software Engineer**, *VoiceWeb S.A.*, Athens.

- Redesign and implementation of the company products to follow the microservices architecture paradigm using Spring Boot
- Product's data layer improvements, creation of a Rule Engine (MongoDB) in the backend instead of reading the rules from XML files
- Implementation of a novel RESTful API for the Dialog Manager
- Redesign and implementation of a new UI for the NLI (Analytics) platform

May 2016 – **Software Engineer**, *G.N.T. Information Systems S.A.*, Athens.
July 2018

Software development on multiple projects using Java EE/Spring frameworks for backend services (EJB3, Spring Framework, Hibernate, RESTful and SOAP web services), with test-driven approach (JUnit and integration tests). Participation in UI projects written with Vaadin and Android frameworks.

Education

Academic Qualifications

2016–2018 **M.Sc. "Information and Communications Technologies"**, *National and Kapodistrian University*, Athens, 8.55/10.

M.Sc. Thesis: Implementation of a Hate Speech detection framework using different Machine Learning, Deep Learning and text representation approaches. Supervisors: Professor Panagiotis Stamatopoulos (UoA) & Dr. George Giannakopoulos (NCSR Demokritos)

2008–2013 **B.Sc. in Management Science and Technology**, *Athens University of Economics and Business*, Athens, 7.0/10.

2002–2008 **High-School**, *Lycee Franco-Hellenique Eugene Delacroix*, Athens, 18.9/20.

Technical and Language skills

Technical skills

- **Programming Languages:** Python, Java, R, C/C++, bash
- **Web Frameworks:** Django, FastAPI, Flask, Spring, JavaEE (EJB3)
- **ML & Data Science libraries:** PyTorch, Tensorflow/Keras, scikit-learn, huggingface, flairNLP, spaCy, numpy, pandas
- **MLOps:** Airflow
- **Testing:** JUnit, Arquillian, Spring Integration Tests
- **Databases & Search Engines:** MySQL, Oracle SQL, PostgreSQL, MongoDB, Elasticsearch
- **Deployment:** Kubernetes, Docker, JBoss/Wildfly, Tomcat/TomEE
- **Version Control:** Git, SVN, CVS
- **CI/CD:** Jenkins, GitLab CI/CD
- **OS:** Linux, Windows
- **Other:** LaTeX, MS Office, JIRA, clickup

Language skills

Greek: Native

English: IELTS, 7/9

French: SORBONNE II, Assez Bien

Conferences and Seminars

- Artificial Intelligence for Multilanguage Services for Citizens and Businesses, ELRC workshop (virtual event, 15/12/2020)
- Using text data to improve causal analyses of electronic health records (speaker: Dr. Aaron Kaufman, place: NCSR Demokritos, date: 7/11/2019)

- 20th International Conference on Computational Linguistics and Intelligent Text Processing (CICLing2019, place: LaRochele France, dates: 7-13/04/2019)
- Object-Centric Machine Learning (speaker: Leonidas Guibas, place: Department of Informatics and Telecommunications, date: 5/5/2017)
- The role of relays in the 5G systems (speaker: Vougioukas Dimosthenis, place: Department of Informatics and Telecommunications, date: 26/5/2017)
- Hardware architectures for telecommunication vertices (speaker: Vlassopoulos Nikolaos, place: Department of Informatics and Telecommunications, date: 26/5/2017)

Publications

- o Iraklis A. Klampanos, **Chrysoula Themeli**, Alessandro Spinuso, Rosa Filgueira: "Dare platform: a developer-friendly and self-optimising workflows-as-a-service framework for e-science on the cloud", 2020, Journal of Open Source Software
- o **Chrysoula Themeli**, George Giannakopoulos, Nikiforos Pittaras: "A study of text representations for Hate Speech Detection", 2019, CICLing