

# SISSY THEMELI

Accomplished Software Engineer with over 7 years of expertise specializing in the development of backend systems and APIs. Currently working as a Software Engineer at Unitary Ltd, contributing at the implementation of the product's backend to operate at scale with resilience and robustness. Always eager to embrace emerging technologies and enhance my skill set, I work best remotely and I thrive in environments that champion diversity, foster personal growth, and welcome innovative ideas.



## CONTACT

✉ c.themeli@gmail.com  
☎ +30 6993997357  
🏠 <https://sissythem.github.io/>  
📧 @sissythem  
🌐 Sissy Themeli  
📞 0000-0002-6759-4136

## SKILLS

### Programming Languages

Python	●●●●●
Java	●●●●●
Bash	●●●●●
Go	●●●●●
R	●●●●●

### Frameworks & Libraries

FastAPI, Django, Flask	●●●●●
Celery, Pika	●●●●●
ML Libraries	●●●●●
Spring	●●●●●

### MLOps / DevOps

Prefect	●●●●●
Airflow	●●●●●
Kubeflow	●●●●●
Docker	●●●●●
Kubernetes	●●●●●

### DBs/Message Brokers

Relational DBs	●●●●●
Redis	●●●●●
MongoDB	●●●●●
ElasticSearch	●●●●●
RabbitMQ, SQS/SNS	●●●●●

### VCS, CI/CD

Git	●●●●●
GitLab CI/CD	●●●●●
GitHub Actions	●●●●●

### Operating Systems

Linux	●●●●●
Mac	●●●●●
Windows	●●●●●

### Other

LaTeX	●●●●●
MS/Libre Office	●●●●●

## WORK HISTORY

### Senior Software Engineer

📅 June 2022 - today

📍 Unitary, London

- Redesign and implementation of a decoupled architecture of the backend services, elevating its robustness, reliability, and scalability. This initiative involved collaborating in a cross-functional team and implementing cutting-edge technologies to fortify the system's foundation.
- Designed and implemented ML pipelines and workflows interacting with our backend systems using Prefect as the orchestration tool, aiding the Machine Learning team to standardize and automate their processes
- Eliminated tech debt and enhanced the code base as well as improved the unit and integration test coverage to ensure reliability and seamless production releases in order to deliver dependable software.
- Designed, planned, and implemented multiple product features, in collaboration with stakeholders to better understand requirements, conceptualise efficient solutions, and bring innovative functionalities to fruition.

### Senior Software Engineer | Tech Lead

📅 April 2021 - May 2022

📍 Linked Business, Athens

- Implemented diverse text mining initiatives, extracting crucial information from official state documents to enhance our understanding of company instances in acquired datasets.
- Led end-to-end design, planning, and implementation of the KYC Report, a pivotal company product. This involved orchestrating backend microservices and establishing robust pipelines (e.g., CI/CD) to streamline development workflows.
- Training and mentoring of a team of 4 Junior engineers. Prepared training material and helped with on-boarding new team members.
- Collaborated closely with ML engineers to revamp the company name matching project, driving significant improvements by building automated pipelines using Airflow. This collaboration showcased an interdisciplinary approach to optimizing and refining critical components of the company's technology stack.

### Software & ML Engineer

📅 September 2019 - September 2021

📍 NCSR Demokritos, Athens

- **DARE Project:** Developed an intermediary platform bridging user applications and underlying computing resources. Leveraging Container Orchestration technologies (e.g. Kubernetes, MPI parallel processing frameworks, etc.), I orchestrated a sophisticated system offering Workflows-as-a-service. The Microservices Architecture was employed, with all components meticulously crafted in Python using Django and Flask.
- **DebateLab:** Led the development of an advanced Argument Mining system tailored for Greek news articles. Utilizing prominent ML Python libraries such as flairNLP, Hugging Face Transformers, and PyTorch, the system demonstrated a nuanced understanding of linguistic structures to extract meaningful insights for argumentation analysis.
- **FAIR4Fusion:** Played a pivotal role in a research initiative aimed at democratizing European-funded data for the fusion community. Instrumental in developing a Demonstrator for this project, I employed the Django Framework to seamlessly integrate with the DARE platform backend in order to extract robust data analytics.

## ⚙️ WORK HISTORY (CONT.)

### Software Engineer

📅 August 2018 – August 2019  
📍 VoiceWeb, Athens

- **Voice Application Development:** Architected and implemented a range of voice applications for our clients, leveraging the core product, the Dialog Manager.
- **Product Enhancement and Innovation:** Drove the implementation of multiple features and enhancements across the core company's products.
- **Dialog Manager Redesign:** Led the comprehensive redesign and implementation of a new version of the Dialog Manager, transitioning from a monolithic application to a modularized microservices architecture.
- **Rule Engine Implementation:** Revolutionized the outdated dialog rules parsing system from XML files by introducing a robust Rule Engine. Leveraging MongoDB and the Spring Framework, this overhaul significantly improved efficiency, maintenance, and adaptability in managing dialog rules.

### Software Engineer

📅 May 2016 – July 2018  
📍 GNT Information Systems, Athens

Extensive involvement in software development across multiple projects, primarily utilizing Java EE and Spring frameworks (including EJB3, Spring Framework, RESTful, and SOAP web services). Adhering to a test-driven approach, proficiently implemented comprehensive testing strategies encompassing JUnit and integration tests. Additionally, actively participated in UI projects utilizing Vaadin for web applications and Android frameworks for mobile applications, showcasing versatility and a holistic approach to software development.

## 🎓 EDUCATION

### M.Sc. in Computer Science

📅 October 2016 – October 2018  
📍 Dep. of Informatics, UoA, Athens  
Thesis: Hate Speech Detection using different text representations

### B.Sc. in Management Science & Technology

📅 October 2008 – December 2013  
📍 AUEB, Athens

## NOTABLE PROJECTS

- 🔧 Argument Mining system on Greek news articles
- 🔧 Development of an e-science platform on the cloud
- 🔧 Hate Speech detection application on online user comments, e.g. tweets
- 🔧 Python project on big geospatial data (feature transformation, learning and clustering)

## PUBLICATIONS

Dare platform: a developer-friendly and self-optimising workflows-as-a-service framework for e-science on the cloud

👤 Iraklis A. Klampanos, **Chrysoula Themeli**, Alessandro Spinuso, Rosa Filgueira, MalcolmAtkinson, André Gemünd, and Vangelis Karkaletsis

📅 2020 📄 Journal of Open Source Software 🔗 [joss](#)

A study of text representations for Hate Speech Detection

👤 **Chrysoula Themeli**, George Giannakopoulos, Nikiforos Pittaras

📅 2023 📄 Springer Nature Switzerland 🔗 [doi](#)

## LANGUAGES

**Greek** (Mother Tongue)

**English** (IELTS, 2010)

**French** (SORBONNE II, 2006)

## CERTIFICATES

- Modern Application Development with Python on AWS, Coursera, September 2022
- AWS Fundamentals Specialization, Coursera, June 2022
- Go Design Patterns, LinkedIn Learning, June 2022
- Programming with Google Go Specialization, Coursera, June 2022
- Building Containerized Applications on AWS, Coursera, November 2021

## CONFERENCES/SEMINARS

- Artificial Intelligence for Multi-language 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)
- 1st Athens NLP Summer School (place: NCSR Demokritos, dates: 18-25/09/2019)
- 20th International Conference on Computational Linguistics and Intelligent Text Processing (CICLing2019, place: LaRoche France, dates: 7-13/04/2019)
- Object-Centric Machine Learning (speaker: Leonidas Guibas, place: Department of Informatics and Telecommunications, date: 5/5/2017)