Leonardo Emili

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EDUCATION

Sapienza University of Rome

Rome, Italy

Master of Science in Computer Science, Major in Deep Learning

Sep. 2020 – June 2022

Sapienza University of Rome

Rome, Italy

 $Bachelor\ of\ Science\ in\ Computer\ Science,\ 110/110\ cum\ laude$

Sep. 2017 – June 2020

Secondary School Diploma, 100/100

Sep. 2012 - June 2017

EXPERIENCE

Research Assistant

I.T.T. C. Colombo

July 2020 – Present

Sapienza University of Rome

Rome, Italy

Rome, Italy

Developed neural representations for named entities from Wikipedia with Prof. Roberto Navigli,

funded by ERC Consolidator Grant, EU H2020 project number 726487.

PROJECTS

Aspect-Based Sentiment Analysis | PyTorch, Python, Docker, Bash

June 2021 – August 2021

- Explored current state-of-the-art approaches in ABSA
- Designed a multitask learning approach with contextualized embeddings and CRF

Distributed Stock Price Forecasting | PyTorch, Python, Apache Spark

May 2021 – June 2021

- Explored approaches with technical and fundamental analysis in stock price prediction
- Designed a neural approach leveraging technical and fundamental analysis to make predictions
- Implemented a distributed stock price forecasting system to predict S&P 500 stock prices

RESTaurant-reservation | *Docker, Node.js, Flask, Python, Vue.js, JavaScript*

April 2021 – July 2021

- Designed a microservice-based restaurant reservation system with Docker swarm orchestration
- Performed unit testing and stress testing to measure the real system capabilities
- Implemented a responsive web application

Word-in-Context Disambiguation | PyTorch, Python, Docker, Bash

March 2021 - May 2021

- Explored current state-of-the-art approaches in WiC
- Designed an approach with bidirectional LSTM

Ear Recognizer | C++, Android, Java, Python, Bash

January 2021 – March 2021

- Designed an ear recognition system for online verification and identification of enrolled subjects.
- Implemented a simple Android application to showcase system capabilities

SpendyBudget | Vue.js, JavaScript

April 2020 – May 2020

- Designed a full-stack spending tracker to manage expenses on the cloud
- Implemented the authentication system to grant access to the users
- Implemented a responsive web application

Wake-Up Radio for Wireless Sensor Networks | C++, Bash, Python

November 2019 – July 2020

- Explored current state-of-the-art approaches in green WSN
- Implemented an energy-harvesting-aware routing protocol

 $\mathbf{GuideMe} \mid \mathit{Flutter}, \ \mathit{Dart}$

November 2019 – January 2020

- Designed a mobile app for interacting with guides and engaging in trips
- Implemented platform-specific components

Wikifier | PyTorch, Python, Bash

May 2019 – March 2020

- Implemented a model to perform Entity Linking to Wikipedia entities
- Implemented scripts to scrape text from Wikipedia dumps

Orari Sapienza | Android, Java, SQLite, NoSQL, Python, Bash

June 2017 – October 2018

• Designed from scratch an Android application for studying at Sapienza

• Implemented scripts to scrape timetables either from APIs or PDF files

Awards

Honours Program | Excellence Path

 $May\ 2019-March\ 2020$

The Excellence Programme aims to enhance the training of worthy students enrolled in a study programme and interested in activities concerning study and cultural integration.

TECHNICAL SKILLS

Programming Languages: Python, Java, Dart, C, C++, Shell, JavaScript, TypeScript, SQL

Frameworks: PyTorch, Tensorflow, Keras, Flutter, Vue.js, Flask

Developer Tools: Git, Docker, GCP, AWS, LATEX

LANGUAGES

Italian: Native English: Advanced Spanish: Advanced German: Intermediate French: Intermediate