# ALEXANDRA ZISIMOPOULOU

## SOFTWARE DEVELOPER

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Zisimopoulou

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in Alexandra Zisimopoulou

# SKILLS

Programming Languages: Python, Java, C++, MATLAB

Software Skills: TensorFlow, Matplotlib, Numpy, SQL, NoSQL, MongoDB, Git, Jira

Languages: English (C1), Greek

#### **PROJECTS**

# Food Vision

In this machine learning project, we utilize the Food101 dataset and TensorFlow Datasets to construct a model that surpasses the DeepFood paper's top-1 accuracy of 77.4%, achieving a score of 83.79%. We preprocessed the data, performed feature manipulation, model selection, training, evaluation, and prediction to achieve optimal outcomes. Visualizations, such as a confusion matrix and F1 scores plot, offer valuable insights into the model's success.

# 🚰 Master Thesis: The CMB on large angular scales

- Experience in data analysis, including statistical analysis, data visualization, and numerical programming using MATLAB.
- Experience in exploratory data analysis to extract valuable insights from datasets.
- Mathematical Skills: Linear algebra, Statistical mechanics, Differential Equations

## WORK EXPERIENCE

# Backend Developer 07/2022 - Now

#### **PublicNEXT**

- Technologies: Spring framework, Oracle SQL Developer, MongoDB, Git, Jira
- Worked on Microservices
- Implemented scheduling mechanisms to automate Viber/SMS and email workflows.
- Implemented Restful API communication workflows
- Database management, including creating procedures, triggers, and data manipulation.
- Developed backend functionality to manage URL directives for specific product listing pages

Researcher 10/2021 - 01/2022

Foundation for research and technology

Numerical calculations of optical and thermodynamic properties for metals.

### COURSES

#### TensorFlow Developer Certificate in 2023: Zero to Mastery

10/2023 - now

- Neural Network Regression & Classification
- Transfer Learning
- Time Series

Computer Vision

• NLP

#### **CS-473 Pattern Recognition**

- Likelihood & Distribution function
- Hypercube and Gaussian functions
- Prior and Posterior Probabilities
- kth-Nearest Neighbor (KNN) classifier
- -Maximum Likelihood Estimation
- Parzen Windows classifier
- Bayesian Parameter Estimation
- Steepest Descent algorithm

# **EDUCATION**

# Master of Science in Physics, University of Copenhagen

2018 - 2020

Thesis Title: The CMB on large angular scales

#### Bachelor of Science in Physics, University of Crete

2012 - 2018

Thesis Title: Perfect Transmission in Non-Hermitian Scattering Media

GPA: 7.82/10