



Pere Ginebra Solanellas

Phone +45 50 33 63 50

pere.ginebra@gmail.com

I'm a Computer Scientist with interests in Machine Learning and software development. I hold a BSc and MSc in Computer Science, specializing in AI, ML and Algorithms. I'm passionate about problem solving and implementing solutions via efficient code. Currently interested in bridging the gap between the research/development of ML models and their use/deployment in real world tasks. I'm Comfortable in interdisciplinary environments.

WORK EXPERIENCE

Cluster for Molecular Imaging (CMI) – UCPH/Region H

Research Assistant – Lead CS/MLOps Engineer

Copenhagen, Denmark • 2024 - Present

Deployed multiple ML models and PACS DICOM servers using docker on windows and podman on RHEL to simplify research workflows.

Working on deploying the previous on the cloud (OVH Cloud).

Supervised a MSc Thesis on Rodent Multi-Organ Segmentation.

Supervised student assistants to aid with these development tasks.

Cluster for Molecular Imaging (CMI) – UCPH/Region H

Student Assistant

Copenhagen, Denmark • 2022 - 2024

Developed a ML model for organ segmentation of mouse CT scans

Developed an internal code toolbox for handling and processing scans and 3D images.

Implemented a simple annotator using the [napari](#) viewer for faster manual segmentation than that of pre-existing apps used in the lab.

Fustes Solanellas S.A.

Office Assistant

Terrassa, Barcelona, Spain • 2018

Updated internal pricings and logistic data. Worked closely with the accounting department and helped with other day-to-day tasks of this distribution company.

RECENT PROJECTS

MSc Thesis • 2024

Deep Learning techniques for threat identification in x-ray images of hand luggage. Threat segmentation in 3D scans. In collaboration with [Exruptive](#) and DTU Physics/Compute.

BSc Thesis • 2021

Evaluation of the Effect of Feature Map Distributions Across Convolutional Layers on Network Performance (read [here](#)). At KTH and UPC.

Web Portfolio • 2021

Developed a simple personal portfolio using HTML, CSS and JavaScript: <https://pereginebra.github.io/>

Web Information Visualization • 2020

Group project for the Information Visualization course at KTH. Display data from a game world. In JavaScript, React and D3.js ([GH](#))

Chicken Run Game • 2019

Developed a 3D runner/scroller game in the Unity game engine using C#. Pair project for the video games course at UPC. (see [here](#))

ACADEMIC BACKGROUND

Technical University of Denmark – DTU

MSc in Computer Science and Engineering

Copenhagen, Denmark • 2022 – 2024

AI and Algorithms track, with multiple elective ML courses.

Royal Institute of Technology – KTH

BSc Exchange Studies

Stockholm, Sweden • 2022

BSc Thesis and MSc level course in Information Visualization.

Universitat Politècnica de Catalunya – UPC

BSc in Informatics Engineering, Computer Science track

Barcelona, Spain • 2018 – 2022

Honors in the Introduction to Software Engineering course.

La Farga School

Pre-university education

Barcelona, Spain • 2016 – 2018

Developed a simple encryption program in C as a final project.

ADDITIONAL INFORMATION

Technologies:

Python: Main language. Proficient in ML (PyTorch, WandB), computation (Numpy, Scipy), image processing (SimpleITK, OpenCV) and visualization (Matplotlib) as well as native packages.

Java and C++: Used extensively during my studies.

Other Languages: C, C#, JavaScript, React, Matlab, Haskell, F#, OpenGL, Prolog, SQL, OpenMP, Assembly, PDDL, R.

Version Control & Containers: Advanced skills in Docker, podman and GIT.

Linux: Knowledge of bash, basic Linux principles and WSL. Managed a simple RHEL server for DICOM storage at CMI.

Cloud Platforms: Basic understanding of app deployment, Rest APIs and containerization. Interested in further developing these skills.

Other tools: Unity, GIMP, Excel, jupyter notebooks.

Professional Development:

Researched and self-taught many of the previous technologies through my studies and career - such as C, JavaScript, ML for image analysis, containerization, DICOM Servers, RHEL and open software libraries – due to personal interest or for professional projects. This shows I can thrive in interdisciplinary environments lacking previous expertise in my field, although expert guidance is always appreciated.

Languages:

Catalan: Native

Spanish: Native

English: Fluent, C1 level (TOEFL score of 113/120)

Danish: A2