# Davide Placido

PostDoc, Biomedical engineer

## About


Blegdamsvej 3B
Copenhagen Capital Region 2100 Denmark

dav.placido@gmail.com

+45 44102825

davide-placido-6a2419158

daplaci

Personal website


## Machine learning

**Advanced**

Pytorch Keras Scikit-learn Numpy Pandas Google Colab

## Programming

**Advanced**

Python R SQL

**Intermediate**

Bash LaTeX Matlab

**Basic**

C Rust Assembly

## Data management

**Advanced**

Snakemake PostgresSQL duckDB BigQuery Json Git

## Cloud

**Intermediate**

GCP AWS On-premise

## DevOps

**Intermediate**

Github actions Docker CI/CD

## Languages

Italian *(Native speaker)*
English *(Fluent)*
Danish *(PD3)*

## Summary


I am a biomedical engineer with a strong interest in data science in healthcare. With a PhD in bioinformatics and biostatistics, I have expertise in developing machine learning models and handling heterogeneous biomedical data. Now, I am eager to leverage my research experience and translate these innovative applications into real-world solutions.


## Experience

### University of Copenhagen

*02/2023 - Present*

Postdoctoral researcher

Building on previous work, I am working on the development on DL models for cancer detection using new data modalities.

### University of Copenhagen

*04/2019 - 01/2023*

Research assistant and PhD

NLP Neural networks Entity embeddings ICU Pancreatic cancer Medical images

In this period I conducted research at the Novo Nordisk Center for Protein Research. I have been actively working on various projects encompassing machine learning applications on diverse and unique datasets, including registries, electronih health records and medical images. Notably, I worked on the development of models for early detection of pancreatic cancer using patient's disease history from the Danish registries. This study was published in Nature medicine. I also worked on the development of a decision support tool for detecting clinical deterioration using EHR collected in the general depertments, which was published on PLOS digital heath. Other projects involved survival analysis in the ICU and pharmacovigilance using NLP techniques.

### Harvard medical school

*01/2022 - 07/2022*

Visiting researcher

generalizability GCP cloud computing

This experience was part of the change of research environment of my PhD. In this period I visited Chris Sander's lab in Boston, continuing working pancreatic cancer prediction. In particular, the aim of my visit was testing the generalizability of the model trained on the Danish data on a US dataset. To accomplish this, I had to deploy the ML model on a new cloud, Google cloud platform, and develop a new pipeline for the data preprocessing.

### Techincal university of Denmark

*09/2018 - 02/2019*

Research master student

time-series ICU monitors empirical mode decomposition LSTM

This research project was part of my master thesis. In this period my task was to try improving current mortality risk models in the intensive care unit (ICU). In particular, I worked on time-series collected by monitors in the ICU to enhance an LSTM model using hand-crafted features from high-frequency data.

## Education

### Polytechnic University of Turin

*01/2017 - 01/2019*

Turin, Italy

Master degree Biomedical engineering

### Polytechnic University of Turin

*01/2013 - 01/2017*

Turin, Italy

Bachelor degree Biomedical engineering

## Publications

### A deep learning algorithm to predict risk of pancreatic cancer from disease trajectories

*05/2023*

Nature Medicine

Placido D, Yuan B, Hjaltelin JX, Zheng C, ..., Brunak S, Sander C

### Development of a dynamic prediction model for unplanned ICU admission and mortality in hospitalized patients

*06/2023*

PLOS digital health

Placido D, Thorsen-Meyer H-C, Kaas-Hansen BS, Reguant R, Brunak S.

### Discrete-time survival analysis in the critically ill: a deep learning approach using heterogeneous data

*09/2022*

Nature digitial medicine

Thorsen-Meyer HC, Placido D, Kaas-Hansen B.S, Nielsen AP, .. Perner A, Brunak S

### Language-agnostic pharmacovigilant text mining to elicit side effects from clinical notes and hospital medication records

*07/2022*

Basic and Clinical Pharmacology and Toxicology

Benjamin Skov Kaas-Hansen, Davide Placido, Cristina Leal Rodríguez, ..., Stig Ejdrup Andersen

## Certificates

DevOps, DataOps, MLOps
Duke University

2023-05-25

Enterprise Model Deployment
IBM

2021-05-05

ML, Visual Recognition and NLP
IBM

2021-05-05