Davide Placido

+45 44102825 dav.placido@gmail.com Copenhagen 2300, DK

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.

Research experience

Novo Nordisk Foundation Center for Protein Research (CPR) , Denmark

- Postdoc, Søren Brunak group, Feb 2023 - present
  - Worked on cancer detection using etherogeneous primary care data.
- Research assistant + PhD student, Søren Brunak group, Mar 2019 - Jan 2023
  - Worked on building a machine learning model for early detection of pancreatic cancer using patient's disease history from the Danish registries. I also worked on the development of a decision support tool for detecting clinical deterioration using EHR collected in the general depertments.

Harvard Medical School, Boston, USA

- Visiting PhD student @ Chris Sander Lab, PhD external stay, Jan 2022- Apr 2022
  - Worked on validating the model trained in Denmark on an American dataset using Google cloud platform.

Technical University of Denmark (DTU), Denmark

- Undergraduate researcher, visiting master student @ Sadasivan Puthusserypady group, Sep 2018 - Mar 2019
  - I worked on time-series from the the intensive care department to improve a LSTM model using hand-crafted features from high-frequency data.

Technical skills

Machine learning

- Pytorch, Keras, Scikit-learn, Numpy, Pandas, Google Colab

ETL pipelines and databases

- Snakemake, PostgreSQL, duckDB, BigQuery, Json, Git

Programming Languages

- Expert and use daily: Python, SQL
- Less frequent use: R, Matlab, bash
- Have used in the past but haven't worked in a long time: C, Assembly
- Basic knowledge from textbook: Julia, Rust

Cloud computing

- On premise cloud, GCP, AWS, Docker containers and singularities, Github Actions.

Education

Polytechnic University of Turin, Turin, Italy, 2017-2019

- Master degree in Biomedical engineering
  - During my master I specialized in biomedical instrumentation and medical informatics. Here I learned

Polytechnic University of Turin, Turin, Italy, 2013-2017

- Bachelor degree in Biomedical engineering

Main publications

1. Thorsen-Meyer H-C, **Placido D**, Kaas-Hansen BS, Nielsen AP, Lange T, Nielsen AB, et al.
Discrete-time survival analysis in the critically ill: a deep learning approach using heterogeneous data.
NPJ digital medicine. 2022;5: 142.

2. **Placido D**, Yuan B, Hjaltelin JX, Zheng C, Haue AD, Chmura PJ, et al.
A deep learning algorithm to predict risk of pancreatic cancer from disease trajectories.
Nature Medicine. 2023; 1–10.

3. **Placido D**, Thorsen-Meyer H-C, Kaas-Hansen BS, Reguant R, Brunak S.
Development of a dynamic prediction model for unplanned ICU admission and mortality in hospitalized patients. PLOS digital health. 2023;2: e0000116.

4. Kaas-Hansen BS, **Placido D**, Rodríguez CL, Thorsen-Meyer H-C, Gentile S, Nielsen AP, et al.
Language-agnostic pharmacovigilant text mining to elicit side effects from clinical notes and hospital medication records. Basic & clinical pharmacology & toxicology. 2022;131: 282–293.

5. Kaas-Hansen BS, Leal Rodríguez C, **Placido D**, Thorsen-Meyer H-C, Nielsen AP, Dérian N, et al.
Using machine learning to identify patients at high risk of inappropriate drug dosing in periods with renal dysfunction. Clinical Epidemiology. 2022; 213–223.

6. Kaas-Hansen B, **Placido D**, Rodriguez C, Thorsen-Meyer H, Gentile S, Nielsen A, et al.
Eliciting drug safety signals from patient records: a language-agnostic approach.
EUROPEAN JOURNAL OF CLINICAL PHARMACOLOGY. SPRINGER HEIDELBERG TIERGARTENSTRASSE 17, D-69121 HEIDELBERG, GERMANY; 2022. pp. S15–S16.

Languages

Fluent in written and spoken English, PD3 in Danish, native in Italian.

About me

I am always up for board games with friends. I love hiking and road trips, and my routine is baking pizza at least once a week.