

MANDAR CHANDORKAR

📍 Rotterdam, NL
🐙 mandar2812.github.io
🐙 mandar2812

@ mandar.c@pm.me
in mandarchandorkar

SUMMARY

Scientist and engineer with 6+ years experience across industry and research. I am passionate about building intelligent and data-driven systems. My skills are in bringing together my knowledge of machine learning, software engineering and product intuition for creating impact. I love working in collaborative roles with high ownership.

WORK EXPERIENCE

- 12/2019 – Present **Data Scientist - Machine Learning** **Connecterra BV, Amsterdam**
Building the intelligence layer of IDA, a smart assistant for dairy operations.
- Technical leadership and coordination of team projects with the product and customer success.
 - Designed in-house data science experimentation and deployment platform.
 - Deployed reliable, actionable, and customised cattle health management for dairy farmers.
 - Built large scale ($> 10^8$ patterns) ML model training and tuning pipeline used across the team.
 - `tinyML` model improvements giving power savings of 85% on sensor deployments.
 - Minimised deployment cold-start by building asynchronous, real-time micro-services.
- Tensorflow / Python (numpy, pandas, ray, asyncio) / Azure / Docker / K8s / Mongo
- 9/2015 – 11/2019 **Machine Learning Researcher** **CWI, Amsterdam & INRIA, Paris-Saclay**
International scientific collaboration for advancing AI in Space Physics.
- Novel neural network approach for predicting speed and arrival time of solar wind.
 - Uncertainty Quantification of radiation belt physics using Gaussian Process methodology.
 - State of the art probabilistic forecasts of geomagnetism by combining GP and LSTM models.
 - Developed an open source computational toolbox for ML applications in Space Weather.
- Tensorflow / Scala (breeze) / R (ggplot2)
- 9/2012 – 1/2014 **Software Engineer - Data Engineering** **Perk.com, Bangalore**
Admin dashboards for Perk, a rewards based browser platform.
- Built big-data pipelines for batch processing of user activity and email report generation.
 - Developed reporting dashboards for monitoring and visualising activity across time and location.
- Hadoop / MySQL / Codeigniter / PHP

EDUCATION

- 8/2015 – 8/2019 **PhD Applied Physics** **TU Eindhoven, Netherlands**
Thesis: Machine Learning in Space Weather
- 8/2014 – 8/2015 **MSc Artificial Intelligence, Cum Laude** **KU Leuven, Belgium**
Thesis: Large scale implementation of the FS-LSSVM model for classification in Scala.
- 7/2011 – 6/2012 **MTech Industrial Engineering, Honors** **IIT Kharagpur, India**
Thesis: Combinatorial optimization of manufacturing assembly lines.
- 7/2007 – 6/2011 **BTech Manufacturing Science, Honors** **IIT Kharagpur, India**
Thesis: Modelling of coupled vibrations of storage tank - fluid systems.

OPEN SOURCE

DynaML | Scala Machine Learning toolbox for research, education industry.

PlasmaML | A collection of data analysis and machine learning tools in the domain of space physics, more specifically in modelling of space plasmas space weather prediction.

ScalalimageToolbox | Implementation of *Active Shape Models* for identification of incisors in dental radiographs.

PUBLICATIONS

Dynamic Time-Lag Regression: Predicting What and When. *International Conference on Learning Representations*, 2020

Multiple-Hour-Ahead Forecast of the Dst Index Using a Combination of Long Short-Term Memory Neural Network and Gaussian Process. *Space Weather, American Geophysical Society.*, 2018

Probabilistic Forecasting of the Disturbance Storm Time Index: An Autoregressive Gaussian Process approach. *Space Weather, American Geophysical Society.*, 2017