




**DATA SCIENCE RETREAT<sup>®</sup>**  
SINCE 2014



**3 months immersive training  
program in Data Science**



# THE RETREAT

Our approach to teaching is based on extensive experience in state-of-the-art machine learning, data science, and big data engineering. We know what works, and what doesn't. If you want to learn this stuff as fast as humanly possible, this is your best bet:

- Small class sizes
- Battle-tested material
- Experts, at the top of their game, who are good at teaching.

Classes held in the vibrant startup metropolis Berlin



# Team



**DR. JOSÉ QUESADA**  
**FOUNDER & MANAGING DIRECTOR**

Jose Quesada is the founder of DSR. Jose helps others to decide better, do better, or be better through data. Like everyone else, he doesn't know what data science really is, but suspects it has to do with predicting the future before it catches you empty-handed. He holds a PhD in Machine learning and has worked at top research labs (U. of Colorado, Boulder; Carnegie Mellon; Max Planck Institute for Human Development). Previously he was a data scientist consultant, specializing in customer lifetime value, and also head data scientist at GetYourGuide.



**DANIEL VOIGT GODOY**  
**DEAN**

Daniel Voigt Godoy is a Data Scientist and Programmer with more than 15 years of experience in Brazil and in Germany in the financial sector, including private banking and public treasury. His stack has included MatLab, R, Statistica, Python (numpy, scipy, scikit-learn, pandas), Java, Apache Spark, and Scala. Daniel studied Computer Science and holds a Master's degree in Economics from Universidade Federal do Rio Grande do Sul, Porto Alegre. He is also an alumnus of Data Science Retreat (Batch 05).



**ARUN KALARICKAL**  
**HR SPECIALIST**

Arun, originally from India, is currently pursuing his master's in international business and consulting with a specialization in Human Resource Management at the Berlin School of Economics and Law. He has over 6 years of industry experience in Human Resource Management with special focus in Learning and Development. He is handling the human resource activities of Data Science Retreat (DSR) and is also assisting the director in smooth running of the daily operations at DSR.

# IS THIS FOR ME?

- Data Science Retreat is for numerate people with basic knowledge of machine learning. Some programming knowledge is a requisite, for example in R, Python or SQL. We don't expect you to be proficient already but we do expect confidence in your coding, because you will spend most of your time doing it.
- You do not need a deep mathematical background. Some techniques, though, rely on linear algebra and probability theory.
- We update and improve our curriculum for every batch of students coming to DSR. It's emphasis is on helping you find questions you can answer with modern technology and on producing the best performing model humanly possible.
- You will present your work to different audiences. We will train you to do it, but you may want to feel confident speaking in public before applying.



# What people say about us



**“The learning rate is tremendous. Data Science Retreat has pushed me to my limit and beyond”**

**– TOAV: DATA SCIENTIST AT NEWYORKER (BATCH 08)**

Data Science Retreat brings together top data scientists and participants seeking exceptional growth. Our students are an international bunch of highly educated and talented data scientists in-the-making. They all come with a unique idea and are ready to seize the opportunity of turning it into a reality.



**“Exposure to data scientists who are at the highest level in their field. That has gone beyond expectation.”**

**– STEPHAN (BATCH 03),**

DSR is the only program worldwide featuring more than a dozen high-level data scientists as teachers and trainers. They are invested in your progress, and will guide you to have the right mindset, to solve business questions with technology, and how to advise leaders.



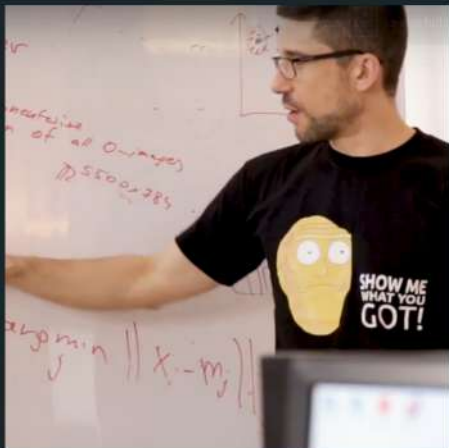
**“After having interviewed hundreds of aspiring data scientists over the years, my experience is that Jose’s graduates are almost universally in the top 10% in terms of readiness to contribute and deep domain expertise. I have so far hired six alumni, all of whom have proven highly capable individuals whose contributions have made a huge impact in Kreditech.”**

**Jose Garcia Moreno-Torres**

**Chief Data Officer at Kreditech**

# WHAT AM I GETTING OUT OF THIS?

## MASTERCLASS



You'll be taught by over 15 experts in the field, covering theoretical and practical uses of data science. You will get over 250 hours of teaching hours.

## PORTFOLIO PROJECT



Build something amazing as your project. This is the most important part of your retreat. We'll be around to help you get rolling and prevent you from getting stuck.

## TASTE OF THE MARKET



After three months of hands-on work, we host a Community Day, where you will meet and talk with hiring managers and data science professionals. The best of our students have landed some outstanding jobs.



# TEACHERS



Jacopo Farina



DR. MAREK GAGOLEWSKI



DANIA MEIRA



PHILIPP SCHMIDT



NOUR KARESLI



DR. PATRICK BAIER



RACHEL BERRYMAN



STEVE UPTON



DANIEL VOIGT GODOY



DR. JESÚS MARTÍNEZ-BLANCO



KEVIN WONG



DANIEL NOURI



QINGCHEN WANG



ALICE MARTIN



JAKUB CIESLIK



MARCO FAEDO



Dr. Francesca Diana

We source the very best experts and teachers with a track record in Data Science and Machine Learning at e.g. Amazon, Audi, EyeEm, Fyber, HERE Technologies, Mercedes-Benz, Porsche, OLX, New Yorker, Soundcloud and Zalando.

# CURRICULUM

## INTRODUCTION TO DATA SCIENCE

Python review, setting up environments, IDEs, Jupyter, Numpy, overview of ML

## PANDAS

How to manipulate series and dataframes using Pandas

## FUNDAMENTALS OF MACHINE LEARNING

Understanding machine learning basic algorithms - focusing on the concepts - also a bit of linear algebra

## DEEP LEARNING DIVE

Introducing DL models and techniques using Pytorch

## SQL

Retrieving data from relational databases

## ADVANCED PIPELINES

How to build pipelines in sklearn, introduction to tests

## ADVANCED PYTHON

Going deeper into Python and pydata stack

## DL FOR COMPUTER VISION

Introducing DL for CV models and architectures using Pytorch

## REINFORCEMENT LEARNING

Introduction to Reinforcement Learning

# CURRICULUM

## MODELS IN PRODUCTION

Deploying models in production

## LEARNING WITH SMALL SAMPLES

Techniques for training models using small datasets

## NEURAL NETWORK FROM SCRATCH

Implementing a basic NN and backprop using Numpy

## MICROSERVICES

Building microservices, containers, SQL, web app

## VISUALIZATION

How to build interactive visualizations

## PRACTICAL DS

Practical aspects when using models in production - imbalance, metrics, etc

## INTERPRETABILITY OF ML MODELS

Techniques to explain models (LIME, SHAP)

## APPLIED ML USING SPARK

Data wrangling and ML models using Spark

## HOW TO WIN IN BUSINESS AND KAGGLE

## DEEP REINFORCEMENT LEARNING

## TECHNICAL COMMUNICATION

# PORTFOLIO PROJECTS

Eduardo Peire used deep learning, paired with a cheap smartphone microscope, to create an app that can diagnose malaria from a blood sample – which used to take a technician hours using state-of-the-art equipment. This project is now successfully going through crowdfunding, and will soon be making a real difference in the fight against malaria.



**DIAGNOSING SKIN CANCER USING MACHINE LEARNING**



**FAKE NEWS DETECTOR FOR THE TECH INDUSTRY WITH DEEP AND MACHINE LEARNING**



**FORECASTING SOLAR ENERGY PRODUCTION USING ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING**



**BUILD A ROAD SIGN DETECTOR FROM SCRATCH**



**USING THE ANT COLONY TO THEORISE DEEP LEARNING**



**PREDICTING THE PETROL PRICES IN GERMANY**

Our Students have developed over 140 projects till date

# COMPANIES

## Some of the companies hiring our graduates

Affinitas	Game Genetics	RocketInternet
Amazon	GFK	Roq.ad
Ascribe	ItemBase	Samsung
Babbel	Kauf.DA	Scout 24
Bayer	Kreditech	Shop Direct
Byebuy	Linkdex	Simplaex
Catawiki	LiveIntent	Teradata
Contentful	Microsoft Ventures	ThoughtWorks
Crosslend	Mobile.de	Westwing
EY	NewYorker	Zalando
Eyequant	OLX	Zeitgold



DATA SCIENCE RETREAT®



# FINANCING

There are two options for financing your new career in data science.

## 1. PAY UPFRONT:

Participants can pay the complete tuition fee of €10,000 before the start of the retreat.

### TWO INSTALLMENTS

Participants can pay €5,000 before the start of the retreat and balance €5,000 within the first 2 weeks of the retreat.

## 2. PAY FROM YOUR FUTURE INCOME

*We've arranged financing with Chancen eG, so that your new career can pay for itself. You shouldn't have to miss out on the rewards of your next career just because your current career hasn't put enough money in the bank.*

### WHO CAN GET IT?

You need to have an EU passport, or to have completed your secondary education in Germany.

### WHAT DO I NEED TO DO?

- Get accepted onto DSR and sign the participant's agreement.
- Pass an interview with Chancen eG, who provide the financing. If you live in Germany, the interview's in Berlin. Otherwise, it's online.

# COMMUNITY DAY

We organise Community Day end of every DSR batch for students to present their portfolio project to Data Science community in Berlin as well as Hiring Managers visiting the meetup.

Data Science Retreat organizes the community day in partnership with HELLA Aglaia Mobile Vision GmbH and Deep Berlin.

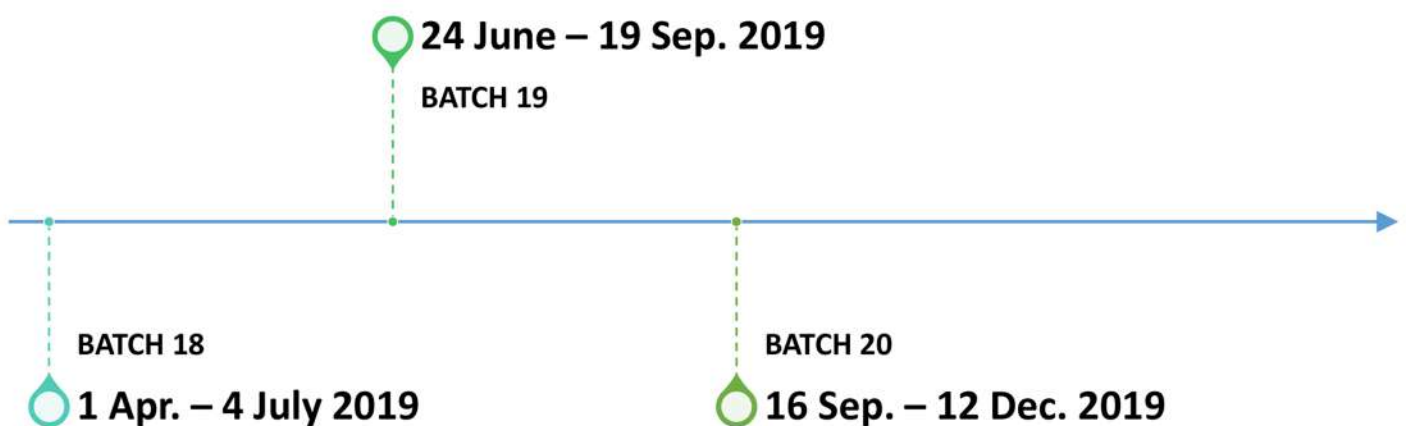


# GRADUATES



DSR has completed 16 successful batches and over 150 students have graduated

## NEXT BATCHES



**APPLY NOW**

for further details visit  
[datascienceretreat.com](http://datascienceretreat.com)



DATA SCIENCE RETREAT®



**Lemma Group GmbH**

Eislebener Str. 4, 10789 Berlin  
org@datascienceretreat.com

+49 (0) 3023633473