Dirk Hornung, Ph.D.

City: Barcelona

Date of birth: October 5, 1991 Place of birth: Fulda, Germany Mobile: +34 695460404 E-mail: hello@drdirk.io

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Professional Experience

since July 2019 AI / ML

> Absolved the Deep Learning and Machine Learning specialisation on Coursera. Applying Neural Networks to active noise canceling simulations. Creating Recommendation systems.

May 2018 - Jan. 2019 **CYSAE**

CTO (2 Developers)

Utility Token for Cuatre Casas

Customised an ERC-20 Solidity Smart Contract for a Spanish lawyer agency. Configured and launched an Ethereum Node connected to a Node-Express REST API to consume the token functionality.

Stamper

Developed a React-Redux Web App with an GraphQL-Prisma-MySQL backend hosted on AWS-ERC docker containers and AWS-S3.

Boardchain

Developed a DAO to decentralise board meetings. The Web App was based on React-Redux backed by Serverless AWS-Lambda, AWS-S3, AWS-Cognito and AWS-Dynamodb.

Oct. 2017 - Apr. 2018

Alda

CTO & Co-Founder (1 Developer)

Alda Chatbot

Created a Messenger Fintech Chatbot. Modelled and trained a RNN before switching to the Dialogflow API for the NLP. Created a Serverless Python-Flask-AWS-RDS (PostgreSQL) backend, combining the Facebook and Saltedge API to connect and query financial information of our clients.

Chatbot UI

Created React-Redux PWA connected to our chatbot. Integrated the app in various Wordpress and Liferay installations.

Feb. 2017 - Sept. 2017 WeGoLoco

CTO & Co-Founder

Created a native iOS app based on Swift.

Education

2019 Deep Learning Specialisation

> Absolved five classes of the Coursera specialisation of Deep Learning to study Neural Networks, Hyperparameter tuning, Machine Learning projects, Convolutional Neural Networks and Sequence Models.

2015 - 2019 Ph.D., Theoretical Physics, Autonomous University of Barcelona (Spain)

Thesis: The QCD Strong Coupling from Hadronic Tau Decays

Supervisor: Dr. Matthias Jamin

Created a numerical chi-squared fitting routine, written in C++ using the frameworks BOOST and ROOT.

2014 - 2015 M.Sc., Particle Physics, Autonomous University of Barcelona (Spain)

Thesis: 1-Loop Anomalous Dimensions of 4-Quark Operators

Supervisor: Dr. Matthias Jamin

B.Sc., Condensed Matter Physics, Goethe University Frankfurt (Germany) 2011 - 2014

Thesis: Band Structure Studies of Graphene and Modified Graphene Structure

Supervisor: Prof. Dr. Roser Valentí

Skills

Data Science Python, Tensorflow, Keras, Pandas, Numpy, Matplotlib, Tensorflow, SVM, NN, CNN, RNN Mathematica Frontend JavaScript, React, React Native, Redux, Flutter, CSS, HTML Backend AWS, Node, Express, MySQL, PostgreSQL, Node, DynamoDB, Serverless, Flask, Zappa, Django Blockchain Ethereum, Solidity, Smart Contracts, Tokens economy, Decentralised Identity, **ICOs Prototyping** Arduino, C++, Fusion 360, 3D-Printing, CNC, Electronics

Marketing Photoshop, Illustrator, Final Cut Pro, SEO, SEM, Wordpress, PHP Soft

Leadership, Public Speaking, Motivating, Mentoring, Confidence, Energy

Awards

June 2019 Imagine Silicon Valley Finalist.

One of ten finalists of more than 500 applicants who sent in a one minute video (https://www.youtube.com/watch?v=Om1DGAa7Cgw) to be sponsored for a

Silicon Valley trip.

February 2018 Winner: Imagine Developer Dreamer.

Got selected to participate in the "Imagine-Express-Train".

September 2018 Best Fintech Pitch

Awarded 1st price at Fintech Stage's event "Fintech War" of over +16 fintech

startups plus a 1k cash price

July 2018 Winner Adidas Finals Herzogen-Aurach

Created the "Adidasum" ICO for an API data marketplace to democratise

data and connect data provider, data scientists and data consumer.

May 2018 MetLife Iberia Financial Inclusion Award

Awarded a 4K cash price at MetLife Iberia to keep promoting Financial In-

clusion.

April 2018 Winner Adidas Hackathon Barcelona

Created a system that could uniquely identify faces and track emotions. We

trained a model to predict the probability of a client purchasing a certain item

in an Adidas store.

Languages

German: native

English: proficient Spanish: proficient

French: intermediate

Hungarian: basics