

Dirk Hornung, Software Engineer

About me

I am Software Engineer by passion. During my 5+ years of experience as a professional web developer I led the technological infrastructure of three Startups using React as their front end. During my recent year at Google I architected propals and was a key player in the communication between the engineering and the design team.

Professional Experience

- Present **Contract Software Engineer**, Counter Abuse Technologies, *Google*
Mar 2020
 - Implemented WebRTC video streaming frontend and FaceMesh Tensorflow model.
 - Implemented accessibility features.
 - Ensured quality with unit and integration tests applying TDD.

Present **CTO & Co-Founder**, Server Infrastructure, *Aplikato* (Startup)
Jan 2020
 - Advising a team of four software developers.
 - Built server and networking infrastructure. Implemented Kubernetes with dynamic NFS storage provision and Jenkins CI/CD automation.

Mar 2020 **Data Scientist**, Data Lake Architecture, *Fresenius Medical Care*
Jan 2020
 - Architected the storage, query and application layer of a Data Lake using Kubernetes, MinIO, Parquet, Presto and Ranger (see: [Data Lake Architecture at Fresenius Medical Care](#)).

Apr 2019 **CTO**, Ethereum Blockchain, *CYSAE* (Startup)
Mai 2018
 - Led a two people developer team.
 - Implemented an Utility Token to allow for the trading of legal services.
 - Implemented a web application anchoring documents in the Ethereum blockchain using Solidity, React, GraphQL, S3 and Postgresql hosted on AWS EKS.

Apr 2018 **CTO & Co-Founder**, Fintech Chatbot, *Alda* (Startup)
Oct 2017
 - Implemented a Fintech Chatbot using React, Flask, Postgres and Tensorflow hosted on AWS (see: [How to build a chatbot from zero](#)).

Education

- Jul 2019 **Ph.D., Theoretical Physics**, *Universitat Autònoma de Barcelona/Aix-Marseille Université*, A grade
Oct 2015 The QCD Strong Coupling from Hadronic Tau Decays.
 - Implemented a parallelized and unit tested C++ fitting routine to extract model parameters using data provided by CERN.

Sep 2015 **M.Sc., Particle Physics**, *Universitat Autònoma de Barcelona*
Oct 2014 1-Loop Anomalous Dimensions of 4-Quark Operations.
Sep 2014 **B.Sc., Condensed Matter Physics**, *Goethe University*
Oct 2011 Band Structure Studies of Graphene

Main Skills

- Languages TypeScript, JavaScript, Python, C++, Java, SQL
Style TDD, OOP, dependency injection, pair programming, CI/CD
Stacks Node.js, Express, React, Vue, Flask, Jest, AWS
Software Git, Docker, Kubernetes, PostgreSQL, NFS, Jenkins

Awards

- Imagine Silicon Valley Finalist
- Winner: Imagine Developer Dreamer
- Best Fintech Pitch at "Fintech War" (1000 EUR)
- MetLife Iberia Financial Inclusion Award (4000 EUR)
- Winner Adidas Hackathon Barcelona (6000 EUR)