

Dirk Hornung, Software Engineer

About me

I am Software Engineer by passion. During my 5+ years of experience as a professional developer I led the technological infrastructure of three Startups. I was a key player in implementing an Azure based data analytics platform at Fresenius Medical Care.

Professional Experience

- Present **Contract Software Engineer**, Counter Abuse Technologies, *Google*
Mar 2020
- Implemented WebRTC video streaming frontend and FaceMesh machine learning 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 Ceph storage provision.
 - Implemented CI/CD automation and backup pipelines using Jenkins.
- Mar 2020 **Data Engineer**, Data Lake Architecture, *Fresenius Medical Care*
Jan 2020
- Architected the storage, query, and application layer of an Azure based 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, Angular, React, Vue, Flask, Jest, Azure
- Software Git, Docker, Kubernetes, PostgreSQL, Ceph, Jenkins

Awards

- Best Fintech Pitch at "Fintech War" (1000 EUR)
- MetLife Iberia Financial Inclusion Award (4000 EUR)
- Winner Adidas Hackathon Barcelona (6000 EUR)