Dirk Hornung, Software Engineer

About me

I am Software Engineer by passion. During my 5+ of years of experience as a professional developer I implemented a C++ fitting routine extracting model parameters from CERN data and a NLP chatbot using Python and Tensorflow. I can beat songs on Expert+ on Oculus BeatSaber.

Professional Experience

Present Mar 2020	**Software Engineer**, Counter Abuse Technologies, *Google Contractor* • Implemented WebRTC video streaming frontend and FaceMesh Tensorflow model. • Implemented accessibility features. • Ensured quality with unit and integration tests applying TDD.
Present Jan 2020	**CTO & Co-Founder**, Server Infrastructure, *Aplikato* • 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 Jan 2020	**Data Scientist**, Data Lake Architecture, *Fresenius Medical Care* • Architectured the storage, query and aplication layer of a Data Lake using Kubernetes, MinIO, Parquet, Presto and Ranger (see: **Data Lake Architecture at Fresenius Medical Care**).
Apr 2019 Mai 2018	**CTO**, Ethereum Blockchain, *CYSAE (Startup)* • 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 Oct 2017	**CTO & Co-Founder**, Fintech Chatbot, *Alda (Startup)* • Implemented a Fintech Chatbot using React, Flask, Postgres and Tensorflow hosted on AWS (see: **How to build a chatbot from zero**).

Education

Jul 2019 Oct 2015	**Ph.D., Theoretical Physics**, *Universitat Autònoma de Barcelona/Aix-Marseille Université*, A grade The QCD Strong Coupling from Hadronic Tau Decays. • Implemented a parallized and unit tested C++ fitting routine to extract model parameters using data provided by CERN.
Sep 2015 Oct 2014	**M.Sc., Particle Physics**, *Universitat Autònoma de Barcelona* 1-Loop Anomalous Dimensions of 4-Quark Operations.
Sep 2014 Oct 2011	**B.Sc., Condensed Matter Physics**, *Goethe University* 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 (1000 EUR)