

GIOVANNI MAGOGA

ma9o.github.io

WORK EXPERIENCE

CTO, Hangoo [🔗](#) in [🔗](#)

Dec 2020 - Apr 2021

taking care of the software side. team from columbia, max plank institut. raised 700k usd. left before incorporation for vision divergence

Software Engineer, Passbase [🔗](#) in [🔗](#)

Mar 2019 - Sep 2020

Joined the company right after inception as 1st engineer and experienced all the challenges of a growing organization. I've been closely working with the founding team (Standford, Google, TUM) to translate business requirements into product features, which contributed in growing the enterprise customer base from 0 to 50+. Substituted CTO. witnessed the largesd seed round in europe. cowboy, eniac. Kept in touch with the founders

- Design and PoC of the authentication/authorization process
- Refactored data model and designed GraphQL API
- Benchmarking and deployment of MXNet AI models
- Refactoring of Rails monolith into SOA with strict typing
- CI/CD pipeline management with the Hashicorp stack
- Technical sales, customer support and QA of outsourced work
- Interviewing, mentoring and onboarding of new team members

OTHER PROJECTS

Stonkify [🔗](#) [%](#)

Mag 2021 - Jul 2021

Frictionless securities market to incentivize discovery and funding of upcoming internet creators

- Assembled a small technical team through YC's SUS program
- Built Typescript app using a Nx monorepo with NestJS GraphQL API and NextJS React frontend
- Built agent based simulation of the market (Python)
- Designed Spring AMPQ microservice interface for 3rd party order book matching engine
- Drafted a protocol for limitation of liability of customers using Monero and I2P
- Undertook business planning, market research and user acquisition

Delegated authentication over TLS [🔗](#)

Nov 2020

Drafted a delegated authentication protocol for identity providers that do not implement SAML/OpenID, requiring only TLS session tickets and AES bulk encryption

- In depth study and experimentation with AES CTR mode, TLS 1.3 and homomorphic encryption
- PoC using openSSL and Mozilla's nss and IBM's homenc libraries (C++)

Curation market for Brave ads network [🔗](#) [%](#)

Feb 2019

Substituted the random ads selection algorithm with a deterministic one based on a curation market

- Modified and rebuilt Brave (Chromium) to natively interface with an Ethereum node (Ninja, gRPC, C++)
- Implemented on-chain bonding curves with Bancor
- Modified chrome extension to enable purchase and sale of tokens

Anonymized Aragon voting app [🔗](#) [%](#)

Jan 2019

Added ring signatures to the voting dApp to conceal the identity of voters. The signatures are computed off-chain and verified on-chain.

- Ring signatures in the browser from Python library transpiled into C++ and compiled to WebAssembly
- Optimized on-chain signature verification for the specific use case to reduce gas fees (Solidity)

EDUCATION

BSc CS, Georg August Universitaet Goettingen [🔗](#)

Oct 2018 - Mar 2019

Exchange year, attended MSc courses

- Parallel computing (CUDA, OpenMP, SLURM)
- Information theory and statistics
- Data science (PySpark, sklearn, seaborn, NetworkX)
- Category theory for programmers (Haskell)

BSc CS, Universita degli Studi di Trento [🔗](#)

Sep 2016 - Sep 2018

MISC

Interests economics, history, linguistics, AI, cinema, gliding, rts **Languages** Italian, English, German, Spanish