

GIOVANNI MAGOGA

ma9o.github.io

WORK EXPERIENCE

CTO, Hangoo

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

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 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 (Java, RabbitMQ) • Drafted an anonymization protocol for limitation of liability (Monero, I2P) • Undertook market research and user acquisition (30 trial signups)

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

Anonimized 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