

ENEA GUIDI

LEAD SOFTWARE ENGINEER

+39 333 500 5981

guidi.enea@gmail.com

its-hmny.github.io



EXPERIENCE

LEAD SOFTWARE ENGINEER | CORE SYSTEMS & BAAS

BKN301 / January 2024 - Present

- Led a team of six to refactor and modernize legacy banking systems essential for **wire transfers, bank accounts and card management and AML compliance**.
- Developed **301core**, a suite of services managing and abstracting away all core banking processes, exposing them through a simple and coherent interface and facilitating smooth transitions between systems for financial institutions.
- Designed and implemented a **BaaS** platform, offering essential services like **Notifications, Realtime Updates, Authorization and Strong Customer Authentication (SCA)** as well as **Document Management** to allow other teams to focus only on the clients' business logic.
- Supported one of **Italy's leading financial institutions** during a major migration, leveraging **301core's** interface to integrate multiple providers at the same time and ensuring minimal service disruption.
- Produced **technical documentation** to shed a light on more complex, old and obscure processes of the financial world allowing new hires to be onboarded quickly and external teams to proceed faster with integration of more complex features.
- Rapidly iterated and delivered key platform features under tight deadlines, maintaining pace with fast-evolving business needs while **coordinating with cross-functional teams** to align on best practices and ensure timely delivery.

SOFTWARE ENGINEER | BLOCKCHAIN AND R&D

BKN301 / October 2022 - January 2024

- Developed **301chain**, a **Closed Payment Circuit (CPC)** built on the **Stellar blockchain**, supporting over **\$500 million** in annual transaction volume.
- Adopted a **DevOps methodology** covering everything from feature development to **CI/CD pipeline** and infrastructure provisioning.
- Employed **scalability and stress testing** best practices to ensure the reliability and performance of the payment system.
- Created a **PoC for 301xb**, a cross-border payment solution using blockchain and existing providers to reduce costs and speed up international payments.
- Led the development of **301stablecoin**, a multi-pegged algorithmic stablecoin backed by regional FIAT currencies, tested it with real-world data from region such as **MENA, LATAM, and ASEAN**.
- Collaborated with **economics and statistics professors** to design and test the algorithm, ensuring **real-time adaptability** based on market conditions.

EDUCATION

BSC IN COMPUTER SCIENCE

University of Bologna | Italy

Graduated with final evaluation of 108/110, GDA (27/30)

PROJECTS

3D-CELLULAR-AUTOMATA

A React Three.js webapp to simulate Cellular Automata in a 3D environment

- Technologies:** Next.js, React, three.js, R3F, Typescript
- Challenges:** Learning and working with 3D technologies, simulating big Cellular Automata
- Key Achievements:** Optimized both simulation code and 3D rendering to improve performance

NAND2TETRIS

Collection of code projects for the nand2tetris course

- Technologies:** Go, Parser Combinators, Compilers, HDL
- Challenges:** Implementing a compiler toolchain for toy language and building a simple 16 bit computer from scratch
- Key Achievements:** Learned about the full E2E flow of a compiler (AST, IR, Codegen), experimented with simple hardware design

ITS-HMNY.GITHUB.IO

My personal portfolio and blog website

- Technologies:** Next.js, React, three.js, R3F, Typescript, Tailwind
- Challenges:** Optimizing static asset and SEO metadata, designing the UI from scratch
- Key Achievements:** Statically optimized and generated pages, asset preloading and content writing