

CLAUDIO MONTANARI

[linkedin.com/in/claudio-montanari](https://www.linkedin.com/in/claudio-montanari) | c.montanari.95@gmail.com | github.com/claudioMontanari | medium.com/@c.montanari.95

WORK EXPERIENCE

AI Senior AI Engineer , ELEVANCE HEALTH, Chicago, IL	NOV 2024 - PRESENT
<ul style="list-style-type: none">Technical Team lead of custom built Serverless Generative AI (LLMs and Embeddings) platform for in-house hosting of Open Source and fine-tuned models with a focus on healthcare.Democratizing GenAI in the company and serving 500+ developers to build the next generation of GenAI applications with dozen of applications in production.	
AI Machine Learning Engineer , ELEVANCE HEALTH, Chicago, IL	DEC 2020 - NOV 2024
<ul style="list-style-type: none">Led Blockchain project for settling healthcare transactions on GoQuorum.Quantum Machine Learning using Qiskit, PennyLane, and Jax on IBM hardware.End-to-end data analytics solution for medical claims from Snowflake to Neo4J: infrastructure, data pipelines, back-end (FastAPI) and front-end (React Native) layers.Deployed infrastructure components from Terraform (AWS stack: EKS, Security Groups, R53 records, Karpenter) to K8s (GitHub, KubeFlow, ArgoCD, GoQuorum).Data pipelines for the Asthma Digital Study (Apple, University of California, Irvine).Launched Virtual Primary Care pilot to Sydney Health (10M members), with ownership of several back-end layers (order management, pricing, benefits, identity, etc).	
Software Engineer , WEPO INC., Chicago, IL	MAR - DEC 2020
<ul style="list-style-type: none">Implemented back-end systems in NodeJS, Java Spring and Quarkus.Implemented data pipelines for scraping Facebook, Instagram and YouTube accounts.Deployed and monitored applications in Kubernetes and Grafana on Google Cloud Platform.	
Graduate Research Assistant , UNIVERSITY OF ILLINOIS AT CHICAGO, Chicago, IL	JAN 2019 - MAR 2020
<ul style="list-style-type: none">Profiled C State-Of-The-Art Delegation library up to Assembly level in a NUMA architecture.Implemented data and compute scalable solutions for Delegation.Automated profiling process in Linux environment.	

SKILLS

LANGUAGES	Python, Java, Rust, Javascript	PROFILING TOOLS	Perf, Valgrind, BPF
DATABASES	MySQL, Neo4J, MongoDB	FRAMEWORKS	Spring, FastAPI, NodeJS, React
CLOUD	Kubernetes, Terraform, AWS, GCP		

EDUCATION

Master of Science in Computer Science , UNIVERSITY OF ILLINOIS AT CHICAGO	MAY 2020
GPA: 4.0/4.0	
Master of Science in Computer Science and Engineering , POLITECNICO DI MILANO	JUL 2020
Final Grade: 110/110 with Laude	
Bachelor of Science in Engineering of Computing Systems , POLITECNICO DI MILANO	SEP 2017
Final Grade: 106/110	

ACADEMIC PROJECTS

Blockchain Development , UNIVERSITY OF THE CUMBERLANDS	MAR - AUG 2023
<ul style="list-style-type: none">Implemented and deployed supply-chain applications on Hyperledger Fabric and Ethereum testnets.	
Performance & Concurrent Computing , UNIVERSITY OF ILLINOIS AT CHICAGO	SEP - DEC 2018
<ul style="list-style-type: none">Experimented performance impact of cache locality and false sharing in a multithreaded environment.Implemented and compared different synchronization mechanisms on a linked list (fine grain locking, hand-over-hand locking, RCU, CAS based lock free).Evaluated performance impact of inline AVX2 instructions implementing assembly routines.	

PUBLICATIONS

- Nilanjana Basu, Claudio Montanari, and Jakob Eriksson. *Frequent Background Polling on a Shared Thread, Using Light-Weight Compiler Interrupts*, pages 1249–1263. Association for Computing Machinery, New York, NY, USA, 2021

ACTIVITIES AND AWARDS

Master in Business with Blockchain Technology , UNIVERSITY OF THE CUMBERLANDS	2023 - 2024
<ul style="list-style-type: none">Blended technical and business approach to blockchain technology.Quarterly project-based residency weekends.	
Mentor for Ph.D. students , ELEVANCE HEALTH	2021 - 2023
<ul style="list-style-type: none">Led on-boarding, code infrastructure and projects organization.Highly technical projects with core-business exponential impact (Blockchain and Quantum).	
Qiskit Global Summer School , IBM	JUL - AUG 2023
<ul style="list-style-type: none">Implemented quantum algorithms (teleportation, phase estimation).	
IBM Quantum Spring Challenge , IBM	MAY 2023
<ul style="list-style-type: none">Implemented phase estimation and error mitigation algorithms with dynamic circuits.	
Best overall team with the project "Feel Your City", CHICAGO MOBILITY HACKATHON	NOV 2018