

NICHOLAS SCHARAN CYSNE

Senior Software Engineer | Forward Deployed

(929) 819-1565

nicholas.s.cysne@gmail.com

linkedin.com/in/scharan-cysne

github.com/ScharanCysne

SUMMARY

Senior Software Engineer specializing in AI-native products, agentic systems, and forward-deployed engineering. Experienced leading end-to-end development of production AI applications, from customer discovery and solution architecture to deployment and adoption. Expertise spans LLMs, multi-agent systems, distributed cloud infrastructure, Reinforcement Learning, and full-stack software engineering.

WORK EXPERIENCE

QuantumBlack, AI by McKinsey | McKinsey & Company

New York, NY, USA

Senior Software Engineer | Tech Lead

Feb 2023 – Today

- Led the design and deployment of AI-native products for Fortune 500 organizations, partnering directly with client executives, operators, and McKinsey leadership to translate ambiguous business challenges into production software.
- Architected and developed end-to-end GenAI applications spanning backend services, frontend interfaces, cloud infrastructure, and AI orchestration, delivering measurable business outcomes.
- Designed production multi-agent AI systems leveraging LLMs, retrieval, tool calling, long-term memory, evaluation pipelines, and guardrails to automate complex customer service and operational workflows.
- Built scalable cloud-native platforms using Python, FastAPI, React, Kubernetes, Docker, Azure, and AWS, supporting over 1 million customer interactions per month while maintaining 99.99% service availability.
- Developed conversational AI platforms integrating speech recognition, real-time streaming, telephony, and autonomous agents to deliver production-grade voice and digital assistants.
- Developed a Reinforcement Learning optimization framework for offshore platform design, doubling projected platform lifespan while reducing construction and maintenance costs by 23%.

Goldman Sachs

São Paulo, SP, Brazil

Software Engineer Intern – Asset Management Division

Feb 2022 – Oct 2022

- Designed and implemented a linear optimizer using MOSEK for global asset and capital inventory management.
- Optimized trading algorithm for low-latency performance, enabling real-time trade execution by focusing in cross-border asset movements, leading to reduced processing delays and reduced costs by 5%, or \$20MM, yearly.

EDUCATION

Aeronautics Technological Institute

São Paulo, SP, Brazil

(Instituto Tecnológico de Aeronáutica | ITA)

Masters in Electronics Engineering and Computer Science

Jan 2022 – Jan 2024

- Thesis:** Sequential Learning Framework for Multi-Agent and Multi-Objective Deep Reinforcement Learning
- Research:** Autonomous Systems; Multi-Agent Systems; Game Theory; Deep Reinforcement Learning.

Bachelors in Electronics Engineering

Jan 2018 – Dec 2022

- Thesis:** Deep Reinforcement Learning for Multi-Agent Systems in Multicriteria Missions.
- Research:** Communication Systems; Autonomous UAV Systems; Machine Learning; Deep Reinforcement Learning.

LANGUAGES & TOOLS

- Portuguese (Native), English (C1), German (B1), Spanish (B1)
- Python, TypeScript, JavaScript, Java, C++
- Azure, AWS, Docker, Kubernetes, Terraform, Kafka, Redis, Postgres, GitOps, SonarQube
- Sequential Decision Making, Generative AI, Reinforcement Learning, LLMs, Agentic AI, Multi-Agent Systems, Model Context Protocol, Audio Processing