OneChronos

Formal Methods Engineer

London (Hybrid work environment)

OneChronos is building the bazaar for agentic systems. We're starting in capital markets, where our matching markets routinely account for more than 1% of notional U.S. equity market volume. By bringing together auction theory, distributed systems, artificial intelligence, and deep market structure expertise, we help humans and agentic systems transact more efficiently, improve how value is allocated, and, ultimately, increase global GDP

What You'll Do

You'll build formal models of the market infrastructure powering our periodic auctions, translating informal specifications into precise, machine-checked artifacts. This is an applied engineering role where you'll write production software, not research papers, bringing formal verification into live production systems. Strong Rust skills are essential.

- Partner with engineers and stakeholders to define correctness guarantees and apply formal methods across production systems.
- Translate system requirements into formal models while building infrastructure that advances the organization's long-term verification capabilities.
- Design and implement systems that interact with mixed-integer linear programming (MILP) solvers.
- Adapt formal methods techniques to the performance and latency requirements of highly regulated market infrastructure.

Who You Are

- 1-3 years of software engineering, formal methods, or related experience, with a passion for building software and writing clean, high-quality Rust code.
- Familiar with at least one formal methods framework or solver such as Lean 4, TLA+, cvc5, or Z3. Experience from academic work, open source, or personal projects is welcome.
- A precise, analytical thinker who enjoys reasoning about correctness and translating complex systems into rigorous models.
- A clear technical communicator who can explain complex ideas to both technical and non-technical audiences.

Accelerators

- Exposure to convex optimization or operations research.
- Experience modeling distributed systems.
- Familiarity with financial markets or an eagerness to learn the domain.