

# Ken Barry

## SENIOR / PRINCIPAL JAVA ENGINEER · BACK-END & DISTRIBUTED SYSTEMS

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Available immediately · no notice period

Java engineer with **15+ years** building back-end systems that have to be right and fast: a real-money trading platform I designed and owned for six years, a team of eight I led on its Kafka-based successor, micro-services at **Deutsche Börse / Clearstream**, and a government case-processing system. I take a problem from the requirements conversation to production, I write well-tested code, and I'm comfortable leading a team or working as a senior individual contributor. Since 2023 I have worked as an independent engineer on large Java systems of my own, including heavy day-to-day use of AI coding agents.

Java 8–25   Spring Boot   Micro-services   REST APIs   Kafka   Apache Camel   Hibernate / JPA   SQL: MySQL, PostgreSQL  
MongoDB / Redis   JUnit / Mockito   Maven, Git, Jenkins   Docker · AWS   ELK   Concurrency & low latency   Agile / Scrum

## PROFESSIONAL EXPERIENCE

### Independent Software Engineer — Self-employed

May 2023 – Present · Cork, IE

Full-time design, build and operation of my own production Java systems. Work samples: [ken-barry.com/work](http://ken-barry.com/work)

- **AuToken**: a voice-driven desktop automation system of about 516,000 lines of Java. I own the architecture: 63 service modules exposing about 1,800 documented methods that an LLM agent calls by writing Java, which is compiled and run in the live application. It includes a 180,000-line OpenGL engine. I set the design and did the hard debugging, and AI coding agents (Claude Code, Codex) that I directed wrote most of the code.
- **Prediction & analytics platform** (since 2016): about 220,000 lines of Java and 5,700+ commits, with Hibernate/MySQL, Jetty/Jersey REST and Spring WebSocket. Ingests data from about 45 external sources. It retrains its machine-learning models every night through a self-hosted orchestrator that refuses to publish stale models and redeploys behind the full test suite. Its models were profitable against market prices for years.
- **Data & simulation platform**: a Spring Boot system of about 50,000 lines connected to 15 exchange APIs. It has a custom binary tick store with replay, plus walk-forward backtesting and market-making simulation.
- **Robotics**: an autonomous rover I built myself. It runs about 90,000 lines of Java on a Raspberry Pi 5, with C++ firmware, Kotlin Android apps, sensor fusion and an OpenCV measurement rig accurate to about 3 mm.

### Senior Java Developer — Pythia Sports

May 2022 – Apr 2023 · Remote (London)

Automated pricing and risk management for horse-racing and greyhound markets, supplied to major UK bookmakers.

- Reworked the live race data feeds to cut update latency through the automated pricing path, so prices moved faster.

### Senior Java Developer — Continuous Software

Jan 2021 – Apr 2022 · Cork, IE

- Built full-stack features (React, TypeScript, Node.js, JWT authentication) on a **government justice system** for Saudi Arabia. Delivered to senior public-sector stakeholders against fixed acceptance criteria.
- Principal developer on the RPA pilot that won the tender against nine competitors. It OCR-reads Arabic court documents, extracts the key information and files the email response to the court.

### Senior Java Developer — Deutsche Börse Group (Clearstream Fund Centre)

Jan 2020 – Jul 2020 · Cork, IE

- Built back-end **micro-services on Apache Camel** that automated the classification and reporting of contract notes and fund statements at a regulated financial-market infrastructure. They replaced manual, email-driven handling of sensitive documents.
- Set up an ELK stack for log analysis across servers.

### Senior Software Engineer — RISQ Capital

Jan 2018 – Jan 2019 · London, UK

- Performance work on an ultra-low-latency C++ trading system. Designed Java web services alongside it, including fuzzy matching of external event names to internal reference data.

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| <b>Principal Java Engineer</b>                                                                                                                                                                                                                                                                                                                                                                                                        | Jan 2017 – Jan 2018               |
| <ul style="list-style-type: none"><li>Led a team of up to eight building the event-driven successor platform on <b>Kafka</b> and Spring XD, backed by MongoDB, ZooKeeper and Redis. Ran 1:1s, performance reviews and sprint planning, and set the CI and code-review standards.</li></ul>                                                                                                                                            |                                   |
| <b>Technical Lead</b>                                                                                                                                                                                                                                                                                                                                                                                                                 | Oct 2015 – Jan 2017               |
| <ul style="list-style-type: none"><li>Led the team technically through the 2016 company split. Voted joint MVP with the CTO afterwards.</li></ul>                                                                                                                                                                                                                                                                                     |                                   |
| <b>Senior Java Developer &amp; ScrumMaster</b>                                                                                                                                                                                                                                                                                                                                                                                        | Mar 2014 – Oct 2015               |
| <ul style="list-style-type: none"><li>Led the integration of a major Asian B2B partner over latency-critical event messaging. Went on site in Hong Kong as the lead engineer on the company's first major B2B deal. Voted MVP.</li></ul>                                                                                                                                                                                              |                                   |
| <b>Java Developer</b>                                                                                                                                                                                                                                                                                                                                                                                                                 | May 2012 – Mar 2014               |
| <ul style="list-style-type: none"><li>Designed, built and owned the <b>real-time pricing and risk platform</b> that traded multi-million-dollar accounts from 2012 to 2018. It gave risk managers a live view of every position and hedged automatically. Cut latency by bringing a slow remote service into the platform as an in-process library. Worked directly with traders and risk managers as the platform's users.</li></ul> |                                   |
| <b>Software Developer — Ericsson</b>                                                                                                                                                                                                                                                                                                                                                                                                  | Mar 2011 – May 2012 · Athlone, IE |
| <ul style="list-style-type: none"><li>Built large-scale network-monitoring and command-line management tools in Java. Earned the Oracle Certified Professional Java Programmer certification.</li></ul>                                                                                                                                                                                                                               |                                   |
| <b>Java Developer — EMC (now Dell)</b>                                                                                                                                                                                                                                                                                                                                                                                                | Jun 2008 – Feb 2011 · Cork, IE    |
| <ul style="list-style-type: none"><li>Contract Java developer: built a Swing tool that helps field engineers migrate large data volumes between storage arrays. Before that, a six-month UCC placement building BI data visualisation.</li></ul>                                                                                                                                                                                      |                                   |

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| <b>EDUCATION &amp; CERTIFICATION</b>                                                                            | <b>WAYS OF WORKING</b>                                                                                                                    |
| <b>BSc Computer Science</b> , University College Cork, 2005–2009                                                | Test-first where it pays off; CI and code review; Agile/Scrum (experienced ScrumMaster); mentoring; working directly with business users. |
| <b>Oracle Certified Professional</b> , Java Programmer (OCPJP)                                                  |                                                                                                                                           |
| <b>TECHNICAL SKILLS</b>                                                                                         |                                                                                                                                           |
| <b>LANGUAGES</b>                                                                                                | <b>FRAMEWORKS &amp; INTEGRATION</b>                                                                                                       |
| Java (8–25), SQL, TypeScript/JavaScript, Kotlin, C++, Go, Python, Bash                                          | Spring (Boot, Integration, WebSocket), Apache Camel, Kafka, ActiveMQ/RabbitMQ, Jetty/Jersey, REST, React, Node.js                         |
| <b>DATA</b>                                                                                                     | <b>BUILD, TEST &amp; OPS</b>                                                                                                              |
| MySQL, PostgreSQL, MongoDB, Redis, Hibernate/JPA                                                                | Maven, Git, Jenkins, Docker, JUnit, Mockito, ELK, AWS EC2, Linux                                                                          |
| <b>AI &amp; ML</b>                                                                                              | <b>OTHER</b>                                                                                                                              |
| LLM agents and tool calling, MCP, Claude Code / Codex, Weka, feature engineering, time-ordered model validation | Concurrency, low-latency design, OpenCV, embedded C++ (Teensy), Raspberry Pi                                                              |