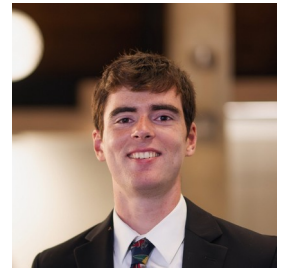


August Nagro  
Software Engineer



## Work Experience

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Axoni  
2021-2024

Integrated Axoni's HYDRA data-platform into SIFI clearing houses.

- Authored major components of the Options Clearing Corporation's Stock Loan program, responsible for processing \$100 billion in contracts annually. Contributed to MTM processing, Default Management, and Pay/Collects. Quickly resolved bugs and refactored the application to meet performance SLAs.
- Worked on the London Stock Exchange Group's Interest Rate Derivatives initiative. Implemented Pairing & Matching, Terminations, Amendments, Advanced Search, and NFRs like resiliency and performance.

Clarity Partners  
2019-2021

- Designed the Hearing Scheduling algorithm for Chicago's Department of Law, processing ~5 thousand property cases per month, worth millions of dollars.
- Developed the backend for Chicago's Shared Housing Portal, which every AirBnB host registers with. Delivered the project ahead of schedule.

UnitedHealth Group

Worked in UHG's Big Data Platform as a Service (BDPaaS) group, designing metrics with Spark on HDFS to track application performance for the new Optum healthcare suite. 95 percentile response time was improved to 32ms from 408.

Pancreatic Cancer  
Research at  
Northwestern University

Researched [Transforming Growth Factor Beta](#) (TGFβ)'s effect on epithelial-mesenchymal transition with Dr. Paul Grippo of NU.

## Education

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Iowa State University

Bachelors in Computer Science. 3.7/4.0 GPA, 34 ACT.

Emphasis in analytics and hashing algorithms including count-min sketch, locality sensitive hashing, min-perf, bloom filters, etc.

## Additional Experience

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Open Source

[Vectorized UTF-8 validation](#) with the JVM's incubating [Vector API Shaka](#), a Scala 3 JavaScript framework.  
[Fastest Universal Hashing implementation](#) on the JVM.  
[Async-Await for Java](#)

Industry Conferences

Presented at ScalaDays, 2023 in Seattle.

Frameworks and Tools

Scala, Java, Kotlin, SQL, Kafka, Docker, Kubernetes, ZIO, Cats, Spark (RDD & SQL), Akka, Spring Boot, React, JDBC, Oracle, PostgreSQL, MySQL, Junit, Selenium, ScalaTest, Netty, Reactive, Jackson, Circe, Hibernate, Apache POI, JPA, OpenCSV, Apache PdfBox, Maven, SBT, Yarn, Agile, extensive knowledge of the JVM and Java/Scala/Kotlin standard libraries.

Iowa State Sailing Club  
(ISSC) President

Managed the ISSC's involvement in Intercollegiate Sailing Association (ICSA) regattas. Overhauled the ISSC's facilities and won the Big 12 Championship both in 2017 and '18.