

London, UK
(44) 7502174356
sergio.nava89@gmail.com

Sergio Navarrete, Software Engineer

ABOUT ME

I am passionate about Computer Science and Mathematics. Co-Founder of [Nava Technologies](#), active in the open source community. Good team leader as well as team player. Focused on delivering quality software in a timely manner.

LINKS

[Nava Technologies](#), [Github](#), [LinkedIn](#)

TOP SKILLS

Java, TypeScript, Python, Elasticsearch, Apache Spark, Big Data, MongoDB, Docker, Kubernetes, AWS

EXPERIENCE

Goldman Sachs, London – *Software Engineer, VP*

DECEMBER 2017 – PRESENT

- Improving the performance of the investment portfolio management digital solution powering [Marcus Invest](#).
 - Deployed an elasticsearch cluster to store data about the performance of the system.
 - Enhanced a set of stress tests to capture more metrics and store them in Elasticsearch.
 - Improved the slow parts of the system by adding caching and parallelism.
 - Overall, reduced the time of rebalancing the portfolios by 50%.
 - Allowed the system to scale from 5000 to 15000 accounts without performance degradation.
- Initial Public Offering (IPO) trading application.
 - Enhanced an internal testing framework to support end to end tests of the trading workflow which increased the quality of the software, no significant production issues detected to date.
 - Introduced Elasticsearch, Logstash and Kibana to manage logs and alerts. Made detecting and debugging problems easier.
- Currently working on new technologies to support businesses within the Investment Management Division.
 - Migrating existing apps from legacy infrastructure to Kubernetes.
 - Working on improvements on the core data model and data access libraries.
 - Mentoring junior members of the team.

Rosslyn Data Technologies, London – Lead Software Developer

JANUARY 2015 – DECEMBER 2017

- Migrated the ETL process from an on premise solution to a cloud based one using Azure Data Factory. Data extraction and validation tool.
 - All together, the solution dramatically reduced the time and complexity of loading data into the data warehouse.
 - The cloud base approach allowed easier scalability.
 - As loading data became easier, the new contracts involved bigger and more frequent loads, which translated into an increase in revenue.
- Developed the first stage of a new ETL process using Hadoop and Spark
- ASP MVC application to search and classify big volumes of data (over 200M rows).
<https://rapid.rosslynanalytics.com>
 - Reduced the search time from minutes to second by using Elasticsearch.
 - Improved user experience by implementing a visual feedback feature for the time consuming classification operations.

INDIVIDUAL PROJECTS

Xpert.

Fully automated Big Data analytics tool.

- Uses Apache Spark to process terabytes of data.
- Elasticsearch a Kibana to store processed data and automatically build dashboards.
- Web UI for the user to customize their analytics, upload data and consume the dashboards.

Mongo Java Server. <https://github.com/bwaldvogel/mongo-java-server>

Fake implementation of the core MongoDB server in Java that can be used for integration tests.

- Second highest contributor to the project.
- 208 Start and 68 Forks on Github.
- Contributed the following features: cursors, oplog, change streams and transactions.

Scene Flow Estimation.

Scene flow estimation based on the optical flow from several cameras

- Graduation research project that resulted in an application to create a 3D movement model of a scene filmed by several cameras.
- Science Fair first prize awarded.

EDUCATION

Havana University, Havana, Cuba – BSc. Computer Science

2009 – 2013

- Wide spectrum computer science course with a strong mathematical background.
 - Top 10 of over 150 students with an average of 4.83 out of 5
 - Honours Diploma Awarded

COURSES

- Machine Learning, Stanford University.
<https://www.coursera.org/account/accomplishments/records/DHSVBULCA7U2>
- Mathematics for Machine Learning: Linear Algebra. Imperial College London.
<https://www.coursera.org/account/accomplishments/verify/GJ9Z5PNC4U7A>
- Mathematics for Machine Learning: Multivariate Calculus. Imperial College London.
<https://www.coursera.org/account/accomplishments/verify/GJ9Z5PNC4U7A>