


Gregory Murray

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WORK EXPERIENCE

Ocient

Chicago, IL

Software Engineering Manager

10/2021 – present

- Led a team of 7 engineers from end-to-end development of database admin features, supporting and enhancing the DDL catalog and core system configuration infrastructure.
- Delivered the ability to quiesce the Ocient database to enable upgrades, allowing the company to meet its SLA of 99.99% uptime while also enabling the operations team to apply OS patches when needed.
- Delivered a key feature that allowed the system configuration's raft consensus state to scale, allowing the database to handle 10,000 tables in a timely manner, supporting \$3M+ in sales opportunity.
- Delivered a new process to setup the cluster through the command line interface. This enabled scriptable and automated system setups, along with an increased end-user experience for QA, operations, and customers.

Senior Software Engineer

03/2021 – 09/2021

- Engineered the way memory is passed around the database engine, allowing for unlimited sized variable-length columns. This was a highly requested feature from customers because the workaround was to truncate data and lose valuable information.
- Resolved 39% of a software version's blocking defects, often dealing with nasty race conditions, memory corruption, and performance slowdowns. This allowed the version to release ahead of a tight deadline.
- Owned the process operator's component for the core database team. Leveraged VTune to identify runtime bottlenecks in performant sensitive code, leading to a general 15% query speedup across software versions.

Software Engineer II

04/2019 – 02/2021

- Designed and implemented the core protocol to fetch statistical parts in the database, leading to a 310% speedup in retrieval times. This feature was crucial in landing a pilot contract, as the old retrieval code could not handle real time ingestion of data.
- Mentored 4 interns and helped convert 3 of them to full-time employees. Meanwhile, the overall company return offer acceptance rate was ~40%.
- Led a cross-team effort to support a SQL array datatype, removing the need for fanout tables in customer schemas. This improved customer query performance by ~21% and ultimately unlocked \$3.5M in sales opportunity.
- Conducted over 80 technical interviews for collegiate and entry-level hires, allowing the engineering team to double its head count during the pandemic.

Software Engineer I

05/2018 – 03/2019

- Rearchitected the logging infrastructure to be multi-threaded, improving logging latency by ~93%. This greatly improved overall performance of the database as logging was used in all areas of the code.
- Created a data generator that mimicked a real world AdTech dataset. Enabled the load of a 2 trillion row benchmark that was published internally to investors, allowing Ocient to secure its next round of funding.

Internships: Echelon Consulting (2017), Pivotal Labs (2016), Citadel (2015)

TECHNICAL SKILLS

Proficient: C++, Python

Familiar: Java, Dart, SQL, JavaScript, HTML/CSS

Tools/Frameworks: Git, GDB, VTune, Google Test, Google Benchmark, Flutter, Google Firebase, Django, React.js, Redux.js

EDUCATION

University of Illinois at Urbana-Champaign

05/2018

Bachelor of Science in Computer Science

GPA: 3.7/4.0

Minor: Mathematics

PROJECTS

"Dubs" mobile application

- Taught myself dart and flutter to create a messenger mobile application that can be deployed to IOS and Android.
- Setup a Firebase backend to store user data, interacting with the backend using the Flutter BLoC design pattern.