Chris Saulit

University of Alberta

EXPERIENCE

Senior Ground Software Engineer
Astranis
Apr 2021 - May 2023
• Evaluated and deployed TimescaleDB timeseries database for high frequency telemetry ingestion from satellites, including developing a tool that builds schema definitions from telemetry metadata.• Initiated an effort to create a command and control web application to manage sending commands to spacecraft. This included selecting the tech stack, bootstrapping the development, and mentoring full-stack engineers as well as significant development contributions. Achieved zero reported defects during our first commercial satellite launch and orbit raise (the most critical time of the satellite's life). • Rearchitected a violations monitoring subsystem to ensure scalability across multiple satellites for near real time visibility of anomalies, using Redis caching, message queuing and socket.io based notifications.Skills: Python, Django, React, REST, TypeScript, TimescaleDB, Docker, Kubernetes, Socket.io, Redis, RabbitMQ, YubiKeys, HashiCorp Vault.

Software Lead
Aether Biomachines
Oct 2019 - Apr 2021
Led a small, empowered, high-performing team of engineers to build out an in-house Laboratory Information Management System (LIMS) supporting the unique data tracking requirements of Aether's high-throughput enzyme engineering factory.Skills: Django REST Framework, ReactJS, Docker, AWS.

Senior Software Architect
Iteris
Mar 2018 - Sep 2019
Defined architecture, prototyped technologies and developed scalable solutions for a new Traffic Performance Analytics platform supporting key new multi-tenancy Iteris products such as SPM (Signal Performance Measurement) and re-engineered ones such as ClearGuide (Traffic Analytics). Defined a micro-service strategy, built a central authentication solution, built out a large scale analytics engine using "serverless" technologies, big data aggregation.Also led the development team in adopting best practices and driving change in the areas of automated testing, code reviews, continuous integration and delivery, and release planning.Skills/Technologies: Aurora Postgres and PostGIS, Redshift, Elasticache (Redis), API Gateway, Lambda, AWS Batch, Docker, Python, Pandas, Django, GeoDjango.

Senior Software Architect
Synthego
Jan 2017 - Feb 2018
Designed, developed and implemented a new manufacturing execution and laboratory information system (MES, LIMS) back end to run Synthego's factory which synthesizes RNA for CRISPR genome editing. It replaced the company's initial "minimum viable product" with a production quality solution and prepared Synthego for its next stage of growth. Scope of work included data modeling, back end API (RESTful endpoint) design and development, mobile shopfloor application redevelopment.Skills: Python, Django (ORM, REST Framework), PostgreSQL, AngularJS, JavaScript, Ionic mobile app framework

Senior Software Engineer
Zymergen
Oct 2015 - Dec 2016
Delivered an initial database schema and infrastructure for Zymergen's first iteration of an Enterprise Data Warehouse (EDW). This involved designing and implementing a solution that supports incremental population of a data warehouse in near real time (change data capture, ETL). Also prototyped a solution with Amazon Redshift, and evaluated and deployed Apache Airflow data pipeline framework.Skills/Technologies: Python with Django, Java with Dropwizard and Hibernate, Ruby on Rails, MySQL, Amazon AWS (EC2, RDS, S3), Puppet, Apache Airflow.

EDUCATION

University of Alberta
Undergraduate studies in Mathematics and Computing Science
1982 - 1987

McNally

WEBSITES

LinkedIn: https://www.linkedin.com/in/csaulit/

Source: LinkedIn