

# BRUCE SZUDERA WIENAND

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## Experience

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### Ternary

DECEMBER 2020-JULY 2023

#### *Engineering Manager*

- Led the engineering team responsible for server-side applications; data storage, processing and serving; and infrastructure
- Managed and negotiated stakeholder expectations regarding scope, priority, tradeoffs and timelines
- Introduced processes to maximize communication, collaboration and velocity while remaining light time commitments
- Supported career goals by working with team members to develop growth plans and calibrate at regular cadences
- Built hiring pipeline from screening resumes and coordinating interviews to presenting offers and onboarding hires
- Provided technical guidance and oversight while allowing engineers room to learn for themselves, grow and make mistakes

#### *Founding Engineer*

- Translated high-level feature ideas into actionable implementation strategies and executed from inception to completion
- Designed and built ETL pipelines utilizing Cloud Scheduler, Cloud Run, BigQuery and Golang processing 200TB+ daily
- Ensured reliability of services by designing them to be fault tolerant while also leveraging monitoring and alerting
- Rearchitected storage and serving layers reducing p99 query latency by 90% ensuring high quality customer experience
- Contributed support to community around the open source application Cube and was recognized as a community Hero

### LiveRamp

AUGUST 2018-NOVEMBER 2020

#### *Data Engineer*

- Led cost optimization initiative to decrease my team's cloud spend by over \$1,000,000 per year
- Optimized spend by tuning expensive apps, increasing utilization of costly infrastructure and educating teammates
- Assisted in rearchitecture of Hadoop MapReduce-based pipeline to Apache Spark to modernize tech stack
- Increased reliability of pipeline by improving monitoring and alerting for critical components using Datadog
- Maintained health of twenty apps across five Hadoop clusters running up to 1,000 nodes and 10,000 jobs per day
- Migrated on-prem VM-based big data workloads and high availability servers to GCP cloud using Docker and Kubernetes
- Educated my teammates by leading periodic tech deep dives and organizing overviews of adjacent teams' responsibilities
- Introduced and advocated for various Scrum and engineering best practices to improve health and efficiency of team

#### *Full Stack Engineer*

- Developed a cloud-native web app using React and Node to allow customers to manage segments and compute stats
- Decreased page load time by 90% by reusing slow-loading components to provide the best customer experience possible

## Projects

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### Tenbounce

NOVEMBER 2016-DECEMBER 2021

- Designed and developed a web application which allows trampoline coaches to easily track their athletes' progress
- Implemented an API using Python Flask framework to control, access and display data stored in a PostgreSQL database
- Combined back end with JavaScript front end to create a dynamic, responsive and easy-to-use user interface
- Leveraged Google Charts API to display data to users in a convenient and easily interpreted manner
- Recruited beta testers from Facebook group to gather interesting use cases and suggestions for improvement
- Programmed regression and clustering algorithms to infer important information about user-submitted data points
- Enumerated and administered multiple UI/UX tests to uncover usability and experience flaws and improve upon
- Modified and enhanced functionality as appropriate to improve usability and user experience
- Marketed software to coaching peers and increase usage to over 10 coaches, 300 athletes and 13,000 data points

## Education

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### The University of Michigan, Ann Arbor

APRIL 2017

Bachelors of Science in Computer Science

GPA: 3.92/4.0

Bachelors of Science in Pure Mathematics

*High Honors*

Minor in Linguistics, EECS Scholar

*Coursework:* Data Structures and Algorithms, Web Databases and Information Systems, Machine Learning, Artificial Intelligence, Computer Security, Linear Algebra, Real and Complex Analysis, Combinatorics and Graph Theory, Mathematics of Finance, Computational Linguistics

## Skillset

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Google Cloud Platform, BigQuery, Dataproc, GKE, Docker, Kubernetes, MySQL, PostgreSQL, Terraform, Datadog, Hadoop, MapReduce, Spark, Go, Java, Scala, Python, Flask, JavaScript, Node, React, HTML, CSS, Bootstrap, Git, L<sup>A</sup>T<sub>E</sub>X, Linux, Spanish, FinOps