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Thomas Jarosław Kosciuch

5301-30 Shore Breeze Dr.
Toronto, ON, M8V 0J1 Canada

Staff Engineer (QWealth)

Toronto, ON 2023-06 - current

Lead Integrations

- Led development of Automated Account Opening and Trading Agreements, including integrations with DocuSign
- Introduced and built custom Github and Slack integrations for deployment and reporting workflows
- Built PDF Engines with Microsoft Graph to provide statements for hedge fund and individuals' performance
- Responsible for prototyping and integrating metrics pipelines and monitors, using prometheus, grafana, and DataDog

Mentorship & Leadership

- Transformed the least performing engineer (inherited from the front-end team) into a recipient of 'Outstanding' performance evaluations
- Matured organization's development practices (e.g., encouraged best practices with git; overall type safety and code quality; Jira Tickets and weighting; in- and out of code document)
- Improved inter-team teamwork and effectiveness by running fitness challenges and ridiculous contests (e.g., Government Form Trivia Night)
- Led design review meetings

Lead Infrastructure development

- Implemented a culture of development that starts with RFCs
- Required infrastructure changes to occur through infrastructure-as-code (AWS CDK; docker-compose; etc.)
- Built a number of frameworks and templates (example: EC2 Stack; Lambda-Dynamo Stack)

Senior Backend Engineer (QWealth)

Toronto, ON 2022-06 - 2023-06

Integrations

- Built a lot of integrations (e.g, MX, Wealthscope, D1g1t, Conquest, Salesforce) to improve account management insights and operations
- Developed our testing framework (equipped with integration, unit, and load tests), improving code stability and mitigating regressions
- Implemented Sentry alerts to significantly reduce the time detection and resolution of errors

API Development

- Expanded API to enable graph-like interfacing with data objects
- Upgraded APIs and databases to use up-to-date frameworks

Data Engineering

- Built various data loading and processing jobs from SFTP servers into our local databases (AWS Glue / Athena / RDS / DynamoDb)

Security

- Enabled data encryption at rest;
- locked down permissions via IAM/security groups and IP restrictions
- expanded AWS services to preferentially use internal routing

Software Engineer (Adaptavist)

Toronto, ON 2020-06 - 2022-06

- Helped onboard and mentored junior engineers
- Contributed to internal serverless Slack App- framework
- Designed testing framework used by back-end engineers

Software Developer (Jam Direct)

Toronto, ON 2019-03 - 2018-09

Leadership

- Lead 3-5 junior developers; guided personal development and progress reviews.
- Involved in hiring, conducting technical reviews and project-design and delegation.

Systems Design

- Designed and created architecture for a data manipulation platform saving several \$100,000s for previously-outsourced processing.
- Enabled company-wide user authentication (SSO) across our internal apps.

Research Fellow (University of Toronto)

Toronto, ON 2018-09 - 2019-03

- Developed software to model fluid and heat transfer (computational fluid dynamics).
- Attempted to solve a long-standing problem in statistical thermodynamics and nucleation.

CoOwner (KAT Reit)

Toronto, ON 2018-09 - 2019-03

- Own and manage rental properties
- Build software to analyze building permits to inform purchasing decisions.

Publications (NASA Stennis Space Center)

- Foraminifera reveal a shallow nearshore origin for overwash sediments deposited by Tropical Cyclone Pam in Vanuatu (South Pacific) TJ Kosciuch, JE Pilarczyk, I Hong, HM Fritz, BP Horton... - Marine Geology, 2018
- Sedimentological characteristics of the 2015 tropical cyclone Pam overwash sediments from Vanuatu, South Pacific I Hong, JE Pilarczyk, BP Horton, HM Fritz, TJ Kosciuch... - Marine Geology, 2018

Awards

- NSERC PSD-G	NSERC (University of Toronto)	69000 CAD
- Student Oral Presentation - 1st place Rockfest	University of Toronto	100 CAD
- Faculty of Art and Science Top Doctoral Fellowship	Faculty of Art and Science, University of Toronto	133756 CAD
- Student Travel Bursary UNESCO IGCP 639	UNESCO	350 USD
- Student Travel Award Cushman Foundation	Cushman Foundation	2046 USD
- Marine Science Scholar Division of Marine Science	School of Ocean Science and Tech. at NASA Stennis Space Center	45427 USD
- Outstanding Student Scholarship	School of Ocean Science and Tech. at NASA Stennis Space Center	1303 USD
- Student Chapter of the Year (President)	Marine Technology Society	0 USD
- Student Chapter of the Year (Treasurer)	Marine Technology Society	0 USD
- Student Poster Presentation - 1st place	Bays and Bayous	350 USD
- Student Travel Award	UNESCO IGCP 639	200 USD
- Funded Research Proposal	Marine Technology Society	200 USD

Education

Doctor of Philosophy - PhD, Geoscience , University of Toronto [withdrawn]	2018 - 2019
Master of Science - MS, Oceanography , U. of S. Mississippi at NASA Stennis Space Center	2015 - 2017
Bachelor of Science - BS, Earth and Environmental Sciences , McMaster University	2009-2013

Software Things

Concepts

Backend architecture design	API Design	Non- and Relational database design	Automation design
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Products

AWS

AIM	API Gateway	AppConfig	Athena	Cognito	CodeBuild
CodePipeline	Cloudfront	CDK	DocumentDb	DynamoDb	EC2
ECS	EFS	IAM	Glue	Lambda	Parameter Store
Route 53	RDS	Redshift	S3	SSM	SNS

Docker

Compose	Docker-Compose	SQL	NoSQL	Redis
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Observability

DataDog	Grafana	Prometheus	Sentry	Segment
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OS

Ubuntu	Amazon Linux	MacOS	Windows
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VCS

git	BitBucket	GitHub	GitLab
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Languages

Python	Typescript	JavaScript	Bash	LaTeX	Polish
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