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Thomas Jarosław Kosciuch

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Toronto, ON, M8V 0J1 Canada

Staff Engineer (QWealth)

Toronto, ON 2023-06 - current

Lead Integrations

- Lead Docusign Integrations, including the development of Automated Account Opening and Trading Agreements.
- Introduced and built custom Github and Slack integrations for deployment and reporting.
- Built PDF Engines with Microsoft Graph for hedge fund and individuals' performance.
- Responsible for building DataDog integrations, and migration to prometheus and graphana migration.

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 good use of git; widespread use of typing and comments; Jira Tickets and weighting; in- and out of code document).
- Improved inter-team integration through fitness challenges and ridiculous contests (e.g., Government Form Trivia Night).
- Lead meetings on how to convert ideas into infrastructure, code and database structures.

Lead Infrastructure development

- Started a culture of development that starts with RFCs.
- Force infrastructure development 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).
- Developed our testing framework (equipped with integration, unit, and load tests)
- Implemented Sentry for immediate resolving 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 various 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 a 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 a few rental properties with some friends Kassandra+Alysha+Thomas = KAT.
- 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	Param Store	Route 53	RDS	Redshift	S3	SSM
SNS	Docker:	Compose	Sentry	SQL	NoSQL	Observability:	DataDog
Grafana	Prometheus	Segment	Linux:	Ubuntu	Amazon	VCS:	git
BitBucket	GitHub	GitLab					

Languages

Python	Typescript	JavaScript	Bash	LaTeX	Polish
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