

http://dedins.ky
/website
/github
/linkedin
/email
/volunteer

Thomas Dedinsky

Software Development Engineer II, Amazon

Languages

- Java
- Scala
- SQL
- Python
- JavaScript
- C/C++

Architecture

- AWS KDA, ECS, EMR, MWAA
- Apache Flink, Spark, Hadoop
- AWS CDK, Hydra, Gradle

Hobbies

- Doing:
- Travel
 - Gaming
 - Euchre
 - Artwork
- Watching:
- SSBM
 - Minecraft
 - Movies

Recent Trips

- Mexico
- Japan
- Seattle
- Netherlands
- Nova Scotia
- New Orleans
- Vancouver

Tech Electives

- Computer Architecture
- Programming for Performance
- Data Mining and Warehousing
- Network Flow Theory
- Distributed Computing
- Algorithm Design/Analysis

Work Experience

Software Development Engineer II – Java/Scala

July 2023 - Present

Amazon Canada – Last Mile

- Enhanced defect and exemption attribution for Amazon delivery drivers using route sequences, including a year-long deep dive into validating how data was used per country/program type, and developing new architecture to associate and calculate data-incomplete real-time signals
- Raised the bar for guiding team in diagnosing, mitigating, and fixing high-severity tickets, and operational excellence for unblocking production, deprecating old services, and reducing costs

Software Development Engineer I – Java/Scala

Aug 2021 - Jun 2023

Amazon Canada – Last Mile

- Launched the real-time implementation of our driver reliability metrics, using AWS and Apache big data tech, which processes billions of signals daily with 15 min latency, down from 37 hours
- Created and managed data migration tools and drove validation workflow during year-long data quality phase of driver delivery metrics Flink implementation, upgraded it post-release
- Developed promotion shutoff mechanism and post-campaign stats with Thank My Driver team

Internships

SoC Design Engineer – SystemVerilog/TCL

Sept 2020 - Dec 2020

Intel of Canada

- Helped develop the memory protocol implemented in Intel's Stratix 10 FPGAs and Optane Persistent Memory units in development by modifying Verilog, TCL, and pin layout files

Embedded Display Software Engineer – C/C++/Python

Jan 2020 - Apr 2020

Qualcomm Canada

- Developed for and validated the Snapdragon ASIC's software quad-pipe implementation as part of the Linux Kernel team for Android devices to allow for higher resolution displays
- Created an automated user/kernelspace testing script and a DTSI grammar implementation

Firmware Design Engineer – C++/MATLAB

Jan 2019 - Apr 2019

Infinera Corporation

- Optimized the firmware simulation code by 30% by changing variable ownership between C++ and MATLAB by using preprocessor metaprogramming for code generation to standardize inconsistent variable conversion methods and reducing redundant data transfer in library calls

Intern Software Engineer – Java/React.js/SQL

Apr 2018 - Aug 2018

Veeva Systems

- Implemented features for a full stack life sciences software solution, redesigned the backend of the profile layout management, and improved our machine learning model and tools

Education

Computer Engineering – University of Waterloo

Sept 2016 - Apr 2021

Combinatorics & Optimization (CO) Minor

- Implemented a bluetooth algorithm, two-factor alert system, and website infrastructure for Wearable Cardiovascular Abnormality Monitor smartwatch for capstone design project
- Adapted the Sincronia coflow algorithm paper for scheduling switchboard network operations, including an Apache Thrift fault-tolerant implementation and iterative/recursive approximators
- Designed and hosted the Canadian Engineering Competition 2019 programming competition