

UofT - UG (2015-2019)

- President Stats Union - brought it from a dead union (won with 14 total votes for a president of a union with ~6000 members) to multiple yearly events with attendance in the hundreds
- TAd upper year courses while still in undergrad (TAd my own year students)
- 4.0 GPA in stats courses (didn't do so well in PSY100)
- ASNA leadership from the start - Operations, Events, Case comp
- One-on-One courses with famous profs to learn not publish (Dan Simpson, David Duvenaud)

UofT - Masters (2019-2022)

- Part time masters while working a full time job
- A average (only one non A+ course) in challenging courses
- Publications + Research Visitor at St Mikes
- Got offered to teach courses - moved to teaching my own cohort as a prof

Intact (2017)

- Worked on the data side from the start
- First year intern building a relatively large data project on my own (EoE)
- Built GLM pricing models for regulators

Deloitte (2018)

- Authored a report on the state of AI in insurance
- Reserving audits for a number of customers
- Deployed client-site for almost 8 months - client facing role
- Basically data engineering for a large insurance company to reconcile their book of business (they didnt have it internally)
- Part of the team creating a report for the Ministry of Finance on the state of Auto Insurance in Canada

Semantic - IC (2019-2020)

- Joined as first (and only technical) employee - built the entire ML stack
- First models - BERT based + benchmarks
- Built models exceeding SOTA on a very complex (massively multi-label - 300k classes) dataset with large amount of labelling noise
- Deployed those models to production - first just python script + DB upload, moved to Airflow
- Built a stack of models ranging from simple keyword matching to Deep Learning
- Localizer + Evidence modelling -> built a completely novel model architecture generating supporting evidence for ML predictions
- Gathered customer feedback and iterated on models

- ML feature discovery calls with customers (end users) leading to simple ML models that increased product performance
- Custom QA process for models deployed on-prem in a secure setting
- Created a number of ADRs still used as the model decision documents by the company
- Found and solved a bug in a huge open-source framework (AllenNLP)
- Drove the company culture through hosting weekly games sessions, playing the clown in meetings.
- Created a comprehensive testing suite for the ML stack -> minified models

Semantic - Lead (2021-2022)

- Hired a team of 7 ML Scientist / Engineers
- Managed a team of 7 ML Scientists / Engineers, doing OKRs, Standups, 1-1s, Career development, pushing them to be leaders and growing
- Created hiring policies, interview questions, scoring systems, take-home assignments
- Led ML product roadmapping and delivery
- Led ML product vision of the company
- Led the product expansion into a new market (US)
- Code quality and deployments -> Re wrote the initial product stack reducing technical debt and allowing for new hire onboarding without big issues. Introduced unified code and data standards and processes across the company
- Created multiple new product lines based on customer calls and product insights from internal QA efforts. Demoed to customers leading to upselling in 100k ARR per contract
- Introduced novel non-intrusive data labelling and feedback products allowing to gather more granular labels without impacting the end user's workflow
- Created a custom multi-armed bandit model deployment scheme eliminating guesswork and quadrupling ML deployment velocity to production (monthly to weekly cadence)
- Created weekly progress reports and presented at all-hands and led customer calls
- Created extensive model and prediction fallbacks allowing us to eliminate the need for on-call support on the ML side
- Contributed to Open source libraries supporting US Military veteran care efforts (medspacy). Named the first outside collaborator to the library
- Contributed optimizations to multiple NLP libraries allowing for parallelization of computation (Spacy extensions + Srsly)
- Supervised research projects leading to multiple scientific publications and product improvements
- Created an active learning approach allowing to improve data labelling efforts reducing costs by >75%
- Led the MLOps + DevOps efforts to create ML dev and staging cloud environments allowing for end-to-end model testing for PRs which allowed the team to move away from on-prem dev environment testing.
- Led code review and tech debt improvement sprints across the entire python stack of the company
- Designed and implemented APIs for vending model predictions
- Roadmapped a new MLOps initiative to allow for better data and model monitoring (Feast + MLFlow + Seldon)
- Led internal R&D efforts on new modelling schemes to improve the existing products

UofT - Teaching (2020-2023)

- Created teaching materials and led the lectures with 0 support at the very start of the pandemic
- Taught a non-technical (med students) audience statistics
- Invited to co-teach advanced ML courses alongside David Duvenaud, Murat Erdogdu, Chris Maddison
- Offered to return to teach the Jimmy Ba Deep Learning course
- Modernized the course curriculum adding Attention, Transformers, and diffusion models to the class

Family business (2023)

- Built an english version of the site (WP)
- Done Business dev efforts to expand the company to North America

Misc

- Podcast guest