TAM DANG

tamdangnadmat@gmail

206.370.2981

EDUCATION

University of Washington

M.S. in Computer Science

- Class of 2019
- Advised by Noah Smith

B.S. in Computer Science

- Class of 2018

SKILLS

Cloud Computing

Kubernetes + Docker, ElasticSearch

CI / CD

Jenkins, Artifactory

Mobile Development

Android, Flutter, Firebase

Metrics

Amazon Cloudwatch

Machine Learning

PyTorch, NumPy, scikit learn, matplotlib, Tensorboard,

Data Engineering

Pandas, MySQL, Snowflake

Languages

Python, Java, Kotlin, Golang

LINKS

github.com/dangitstam

tamdang.io

linkedin.com/in/dang-tam

EXPERIENCE

Software Development Engineer II | XEVO, INC. — Bellevue WA, Sept. 2019 - Jul. 2021

- Collaborated across multiple teams in completing core integrations between notification and vehicle telemetry services, which support in-car apps with actions and features that trigger on desired vehicle telemetry events
- Worked closely with product management to implement and validate an in-car notification feature that suggests the most likely phonebook contact to call at any moment using heuristics that leverage the vehicle's current telemetry and the driver's call and SMS logs
- Implemented Android libraries to improve app developer experience by providing easy-to-use APIs for retrieving vehicle geolocation and engine readings from Xevo's vehicle telemetry service
- Improved app developer experience by leveraging Kubernetes and Docker to spin up all necessary backend services in a local Kubernetes cluster to provide developers a one-touch solution for local app development
- Promoted from SDE I to SDE II on March 16, 2021

Natural Language Processing Research | UW CSE — Winter 2017 - Summer 2019

- Collaborated with researchers from UW and the Allen Institute for Artificial Intelligence to improve semi-supervised text classification using neural and Bayesian methods
- Engineered novel neural network architectures by collaborating with researchers on model conception and ideation, on model implementation via PyTorch in a shared git repository subject to rigorous code review and unit testing, and on automating extensive experiments
- Research culminated in the publication of *Variational Pretraining for Semi-supervised Text Classification* by Suchin Gururangan, **Tam Dang**, Dallas Card, and Noah A. Smith (ACL '19)

Software Engineering Intern | PAYSCALE, INC. — Seattle WA, Summer 2017

- Designed and implemented an online service using React JS and ASP.NET that suggests courses from massive open online courseware providers to PayScale users based on their skills
- Developed and conducted A/B tests using VWO and Google Analytics

TEACHING

Graduate Compilers | UNIVERSITY OF WASHINGTON

- Assisted in the winter 2019 offering of graduate-level compilers, which tasked students to solve a problem of their choice by creating a domain-specific language (DSL)
- Aided students by developing an interpreter for an embedded DSL called Embedded MUPL (Made Up Programming Language) using Scala to providee students a complete example of how a language can implement types, conditional flow, lexical scope, and functions
- Duties involved regularly checking in with students throughout their language implementation to provide feedback and guidance, holding office hours, and grading

Undergraduate Programming Languages | UNIVERSITY OF WASHINGTON

- Assisted in running three offerings of the *Programming Languages* course to teach students functional programming paradigms and how they contrast with imperative programming
- Duties involved leading recitation, grading, and providing extra help to students via office hours

PROJECTS

Natural Wine Discovery and Journal — `https://github.com/dangitstam/notes`

- Implemented an app using Flutter + Firebase to help people enjoy wine intentionally by being able to discover natural wines from a curated list and record their tastings by taking a picture, selecting tasting notes, and writing detailed descriptions
- Users can create custom tasting notes that persist and can used in future tastings

Vectorized Viterbi — `https://github.com/dangitstam/twitter-viterbi`

- Created a highly optimized Viterbi decoding implementation for Twitter POS tagging
- Leveraged NumPy broadcasting when computing likelihoods of hidden sequences to perform the processing of input sequences in a single loop for any HMM of fixed order, which greatly improves performance by replacing some Python with functionally-equivalent operations in C