Michael J. Ryan

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EDUCATION

Stanford University – Palo Alto, CA

SEPTEMBER 2023 - MAY 2025

- Master's Degree in Computer Science

Georgia Institute of Technology – Atlanta, GA

AUGUST 2019 - MAY 2023

- Bachelor of Science in Computer Science (GPA: 3.96/4.0)
- Concentrations: Artificial Intelligence and Systems/Architecture

HIGHLIGHTED RESEARCH

Revisiting non-English Text Simplification: A Unified Multilingual Benchmark

Michael J. Ryan, Tarek Naous, Wei Xu | ACL 2023 Main Conference

- Identified, collected, and analyzed 27 monolingual parallel simplification corpora across 12 diverse languages.
- Revealed the best practices for training a text simplification model in low-resource languages through experimentation.

Towards Massively Multi-domain Multilingual Readability Assessment

Tarek Naous, **Michael J. Ryan**, Mohit Chandra, Wei Xu | ArXiv Preprint 2023

- Organized and collected dataset of readability annotations for over 6,000 sentences in 3 languages from 86 sources.

Having Beer after Prayer? Measuring Cultural Bias in Large Language Models

Tarek Naous, **Michael J. Ryan**, Alan Ritter, Wei Xu | ArXiv Preprint 2023

- Quantified presence of bias towards Western culture in LLMs.
- Identified cultural bias in data sources and model embeddings.
- Introduced methods to mitigate this Western bias.

WORK EXPERIENCE

NLP X Lab – Dr. Wei Xu, Atlanta, GA – *Research Assistant*

DECEMBER 2020 - PRESENT

- Researched and authored works on multilingual text simplification and multilingual readability measurement.
- Organized and led a biweekly undergraduate reading group.

College of Computing, Atlanta, GA – *Introduction to AI | Head TA*

JANUARY 2021 - DECEMBER 2022

- Guided 1,633 students in studying Intro to AI over 4 semesters.
- Interviewed, led, and delegated tasks to 26 Teaching Assistants.
- Designed study materials and held project review sessions.

Microsoft Corporation, Seattle, WA – *Software Engineer Intern*

MAY 2022 - AUGUST 2022

- Designed and programmed static analysis tool in C++ for identifying security vulnerabilities throughout Windows OS.

MAY 2021 - AUGUST 2021

- Ported server-specific architecture to serverless functional units.

Uber Technologies, Inc., Virtual – *Software Engineer Intern*

MAY 2020 - AUGUST 2020

- Implemented end-to-end testing in GoLang for bike, scooter, and moped rentals by building a simulated 3rd party CRUD API.

SKILLS

PROGRAMMING

- **Python**: Machine Learning, PyTorch, Tensorflow, OpenCV
- **Azure**: Function Apps, ARM templates, CI/CD, KeyVault, etc.
- **C, C++, C# (.NET Core)**: Microcontrollers, Systems
- **GoLang**: Fx, Microservices
- **Java**: Swing Applications
- **JavaScript**: React, NextJS, NodeJS, Gatsby, ExpressJS
- **Arduino**

FOREIGN LANGUAGE

- **Spanish**: NJ Seal of Biliteracy

PROJECTS

Umifeeds Food Insecurity App

Programmed React frontend and Node backend for a mobile app to match food surplus donors with food insecure recipients.

Knock Knock (HumorBot)

Fine Tuned GPT-2, LSTM, and RNN on reddit jokes dataset and evaluated on humor. Trained classifier to identify offensive jokes.

Sign Assist

Built digital American Sign Language interpreter using Xbox Kinect and C#.

ACTIVITIES

Bits of Good

Senior Developer (Spring '20 - Winter '22)

Developing web applications using NextJS and React for non-profit partners. Interviewing applicants.

GT Honors Program Leadership Council

Member (Fall 2019-Spring 2023)

Guiding and mentoring incoming honors students at Georgia Tech.

RELEVANT COURSEWORK

- Deep Learning
- Graphical Models in ML
- NLP
- CV
- ML