

Tingfeng Xia

CONTACTS

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HONOURS

Dean's List Scholar, 2018 - 2020

ASA DataFest@UofT, 2020, Top12/48

New College Council In-Course Scholarship, 2019, (\$1500)

CORE COURSES

Graduate Level

Linear Regression and Analysis (A)

Bayesian Machine Learning (A+)

Neural Nets and Deep Learning (A+)

Computer Networks (A+)

Computer Vision (A+)

Undergraduate Level

Linear Algebra (A+)

Machine Learning (A+)

Vector Calculus (A+)

Algorithm Design and Analysis (A+)

Computer Organization (A+)

Operating System (A)

TECHNICAL STRENGTH

Programming Languages

Python, C, Java, Javascript, Julia, R

Frameworks & Libraries

NumPy, PyTorch, matplotlib, autograd, React, Express, MongoDB

Technologies

Unix, Git, \LaTeX , HTML/CSS, Heroku

EDUCATION

University of Toronto Sep. 2017 - Jun. 2021 (Expected) | Toronto, ON.
HONOURS BACHELOR OF SCIENCE IN COMPUTER SCIENCE AND STATISTICS
FOCUS: HUMAN COMPUTER INTERACTION AND MACHINE LEARNING
Major GPA: 3.98 / 4.0, CGPA: 3.92 / 4.0

EXPERIENCE

University of Toronto | TEACHING ASSISTANT

Jan. 2021 - May 2021. (Expected) | Toronto, ON.

- TA for course CSC263 Data Structure and Analysis.
- Responsibilities include marking student assignments and holding office hours.

ImageSky, Chinese Academy of Sciences | WEB DEVELOPER

May 2019 - Jul. 2019 | Suzhou, Jiangsu, China

- Designed the user management database and implemented the related CRUD operations.

Ovopark Technologies | ALGORITHM DEVELOPER

Jul. 2018 - Aug. 2018 | Suzhou, Jiangsu, China

- Hybridized and fine-tuned multiple existing binarization algorithms, including Otsu's and adaptive method, for an image pre-processing task, boosting the multi-scenario averaged test accuracy of the original machine learning model by more than 5% (approx. 87% to approx. 92.4%).

RESEARCH EXPERIENCE

IAI Lab at University of Toronto | RESEARCH ASSISTANT

Apr. 2020 - present | Toronto, ON.

- Advised by Prof. Joseph Jay Williams.
- Analyzed different experiment designs by performing statistical significance tests. Also responsible for data cleaning and presentation.
- Led weekly meeting management and continuously improved the process by adopting a design thinking method.

PROJECTS AND WRITTEN WORK

Emoji-Expression-Mask.PyTorch Nov. 2020 - Dec. 2020

- Real-time emotion recognition system using natural masking of emoji to show results.
- Utilized Convolutional Neural Networks for image classification, and innovatively used homography estimation to naturally mask the corresponding emoji of the recognized emotion to human face.

Team-ZeroLoss Jun. 2020

- Analyzed the social impact of COVID-19 through tweet sentiment analysis.
- Trained and used a RoBERTa-based natural language processing (NLP) model for time series analysis of sentiment in COVID-19-related tweets.

uoftnotes Jan. 2019 - present

- 20+ stars Github repository with my notes during university, aiming to create an open study space.