Trinh Hoang Trieu

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Education

2013 – present, *GPA: 3.90 (May 2016)*	Bachelor of Science, Advanced Program in Computer Science	Ho Chi Minh University of Science, Vietnam National University

Research Internships

May 2016 – July 2016	Misfit Wearables Inc.	Deep Learning for Machine Vision

- Work with Tensorflow, Caffe, *bring Deep Learning models onto mobile devices.*

January 2016 – March 2016	Japan Advanced Institute of Science and Technology	Deep Learning for Natural Language Processing

- Translate original *Theano code to Tensorflow*, experiment recurrent models on new dataset.
- Implemented: *Long Short Term Memory, Gated Recurrent Unit, CNN - LSTM* with Tensorflow on top of Mikolov's Word2vec embeddings.
- Improved vanilla Convolutional baseline for Question Classification on Vietnamese TREC dataset.

June 2015 – September 2015	Ecole Polytechnique de Montreal	Educational Data Mining (EDM)

- Build a *computational graph* as an open sourced R package to perform educational data synthesizing.
- Automate learning parameters and generating new data under 11 *standard models of EDM*.

Open-sourced Projects

December 2015 – May 2016	Educational Data Synthesizer	**R (Statistical Computing Language)**

- Extended package, allow customize built-in models and adding new nodes/interactions/models to the graph.

August 2016 – present (on going)	Darkflow	**Python, Tensorflow**

- Allows designing the deep net in text format, training and *freezing the graph* for production environment.
- Compatible with Darknet framework: load / partial load / selectively extract binary weights.
- Current working models: YOLO and **YOLO9000** – state of the art real-time object detection and classification.
- Selected as an **Awesome Tensorflow** repository.

January 2017 – present (on going)	Essence	**C, Numpy**

- Directed Acyclic computational Graph constructor **built from scratch**, with **auto differentiation.**
- Notable demos: LeNet with Batch-Normalization, LSTM on word embeddings for question classification, **Deep Q-Learning** for inverted pendulum controlling, **Visual Question Answering** with VGG16 and stack-3 LSTM features, **Neural Turing Machine** for copying task.
- Working optimizers: vanilla Stochastic Gradient Descent, RMSProp and ADAptive Momentum estimator.
- A selected coding project on **A Wild Week in A.I.** newsletter (issue 35).

Honor, Awards, and Scholarships

2016	Wilmar CLV's top 24 students to present at Project presentation round (top 15%)
2016	Japan Student Services Organization (JASSO) Scholarship for Research (**top 10%**)
2015	America Chamber of Commerce (AmCham Vietnam) scholarship (top 12%)
2015	Mitacs Globalink Research Full Scholarship (**top 7%**)
2014	Full Scholarship for **First Ranked Student** *with Highest GPA* **of 2013 - 2014**
2013	Full Scholarship, University Entrance **Valedictorian**
2012	Southern Vietnam **Mathematics Olympiad Medalist**