

# Trinh Hoang Trieu

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## Education

2013 – 2017	Bachelor of Science, Advanced Program in Computer Science	Ho Chi Minh University of Science, Vietnam National University (VNU)
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## Research Internships

May 2016 – July 2016	Misfit Wearables Inc.	Deep Learning for <b>Computer Vision</b>
<ul style="list-style-type: none"><li>Work with <b>Tensorflow</b>, <b>Caffe</b>; <b>bring Deep Learning models onto mobile devices</b>.</li><li>Develope applications on iDevices (Objective C++): Face recognition, stranger detection, office objects detection and classification.</li></ul>		
January 2016 – March 2016	Japan Advanced Institute of Science and Technology	Deep Learning for <b>Natural Language Processing</b>
<ul style="list-style-type: none"><li>Translate <b>Theano code to Tensorflow</b>.</li><li>Experimented: <i>LSTM</i>, <i>GRU</i>, <i>CNN - LSTM</i> on Mikolov's Word2vec embeddings.</li><li><b>Improved</b> Convolutional baseline for Question Classification on TRECvn dataset (91.8% to 94.2% accuracy).</li></ul>		
June 2015 – September 2015	Ecole Polytechnique de Montreal	<b>Educational Data Mining (EDM)</b>
<ul style="list-style-type: none"><li><b>Build computational graph</b> as an open sourced <u>R package</u> for educational data synthesis.</li><li>Automate learning parameters and synthesize data under 11 <i>models of EDM</i>.</li><li><b>Extended</b> package: allow customize built-in models, add new nodes/ interactions/ models to the graph.</li></ul>		

## Open-sourced Projects

August 2016 – present (on going)	<u>Darkflow</u>	★ 539    🍴 198	<b>Python, Tensorflow</b>
<ul style="list-style-type: none"><li>A tensorflow port of <u>Darknet</u> framework, compatible with darknet's binary weights.</li><li>Load, partial load for transfer learning, train new networks, camera demo, export protobuf graph definition.</li><li>Freezed graph used to produce <b>Tensorflow's Android demo</b>, selected as an <b>Awesome Tensorflow</b> repository.</li></ul>			
January 2017 – present (on going)	<u>Essence</u>	★ 40    🍴 10	<b>C, Numpy</b>
<ul style="list-style-type: none"><li>Directed Acyclic computational <b>Graph constructor built from scratch</b>, with <b>auto differentiation</b>.</li><li>Notable demos: LeNet with BatchNorm, <b>Deep Q-Learning</b> for inverted pendulum control, <b>Visual Question Answering</b> with VGG16 and stack-3 LSTMs on GLOVE features, <b>Neural Turing Machine</b> for copying task.</li><li>Working optimizers: SGD, RMSProp and ADaptive Momentum estimator.</li><li>A selected coding project on <b>A Wild Week in A.I.</b> newsletter (issue 35).</li></ul>			

## Honor and Awards

2016	Asian Undergraduate Summit on Smart City (Singapore)
2016	Japan Student Services Organization (JASSO) Scholarship for Research student.
2015	America Chamber of Commerce (AmCham Vietnam) scholarship.
2015	Mitacs Globalink Research Full Scholarship.
2014	Full Scholarship for <b>First Ranked Student with Highest GPA of 2013 - 2014</b>
2014	<i>Your Online Learning Assistant (YOLA)</i> 's Full Scholarship.
2013	Full Scholarship, University Entrance <b>Valedictorian</b>
2012	Southern Vietnam <b>Mathematics Olympiad Medalist</b>