Dang Le Dang Khoa

(+65) 8398 3951
dangledangkhoa@gmail.com
github.com/dangkhoadl
linkedin.com/in/dangledangkhoa

Work Experience (selected)

Research Engineer	Institute for Infocomm Research - A*STAR	February 2020 - Present

- Prepare data and train model for Automatic Speech Recognition System, mostly text language models
- Optimize team business operational cost

Languages/Technologies: **Python, Bash**

Master of Engineering Candidate	Satellite Research Centre	August 2016 - August 2018

- Implemented a design of Star Tracking Algorithms onto a Programmable System-on-a-chip system.
- Optimized the pattern recognition algorithm runtime by implementing the connected component labeling algorithm on parallel processors. Runtime is improved 64% on average compared to traditional processor approach.
- Optimized and designed the pattern searching algorithm by applying k-ary tree data structure. Time complexity and runtime improved 31%, but space complexity and memory increased 22%.

Languages/Technologies: **C/C++, Python, Bash**
Source code: git.io/vpucY
Publication: https://doi.org/10.32657/10220/48371

Education

Master of Engineering	Nanyang Technological University	August 2015 - August 2018

- School of Electrical and Electronics Engineering - Research.
- Thesis title: Implementation of An Autonomous Star Recognition Algorithm using Hardware-Software Co-Processing Approach.

Bachelor of Engineering	Vietnam National University HCMC	August 2010 - April 2015

- Ho Chi Minh City University of Technology - Electrical and Electronics Engineering - Second Upper Honour.
- Major in Automation and Control engineering, minor in Robotics and Embedded System Design.
- Thesis title: Applying of Fuzzy Logic Algorithm on Legged Locomotion Robot.

Projects (selected)

Stock Price Predictor

- Predicted Stock Price data by Linear Regression and ARIMA modeling approaches.
- Optimized Model's accuracy by 20% by performing feature engineerings and hyper-parameters optimizations.
- Evaluated and Backtested models based on Live Stock Price Simulator on MetaTrader4.

Financial Knowledge:

  Coursera - Introduction to Financial Markets
  Coursera - Portfolio and Risk Management

Languages/Technologies: **Python, pandas, numpy, matplotlib, sklearn**
Source code: git.io/vpuCA

Dota 2 Hero Recommendation

- Recommended game characters based on historical user data collected by Open Dota API.

Languages/Technologies: **Python, flask, pandas, numpy**
Source code: git.io/fhV1q

Certificates and Related Courseworks

- Coursera - Data Structures and Algorithms Specialization
- Coursera - Machine Learning Specialization
- Udacity - Machine Learning Engineer Nanodegree
- Coursera - Mathematics for Machine Learning
- Coursera - Introduction to Deep Learning
- Coursera - Big Data Essentials: HDFS, MapReduce, and Spark RDD
- MIT-6.041-Probabilistic Systems Analysis and Applied Probability
- UC Berkeley - CS162 - Operating Systems and Systems Programming
- UIUC - CS425 - Distributed Systems
- EIY - The Art of Public Speaking

Competition Achievements

- Google Code Jam 2018 - Round 2 qualifier - Top 10% Candidates
- The Art of Public Speaking - Best Performer