KHOA HO

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EDUCATION

Grinnell College *Expected May 2018*
B.A., Double Major in Physics/Mathematics, Minor in Neuroscience Grinnell, IA

- **GPA:** 3.7 / 4.0
- **Selected coursework**: Computational Physics, Numerical Analysis, Object-Oriented Design, Analysis of Algorithms

Udacity
Nanodegree, Artificial Intelligence Engineer *Expected 2018*
Nanodegree, Self-Driving Car Engineer *Expected 2018*
Nanodegree, Deep Learning Foundation *September 2017*

SKILLS

- **General Programming:** Python, Java, C**,** MySQL, JavaScript
- **Deep Learning:** NumPy, TensorFlow (CPU & GPU), Keras, Google Cloud, AWS

PROJECTS

Computer Vision *October 2017*

- Wrote a pipeline (Python, OpenCV) to detect road lanes from video feeds of a car-mounted camera

Deep Learning *April – September 2017*

- Classified household images (CIPHAR-10 dataset) with CNN; generated hand-written digits using DC-GAN
- Employed Seq2Seq model for English-French translation; generated Simpson TV scripts with LSTM networks

Block Chain *September 2017*

- Simulated a bitcoin-like ledger for 2 parties (Java), featuring proof-of-work, cryptographic hashing, and block chain

WORK EXPERIENCE

Full-Stack Development Intern *May – August 2017*
College Kickstart (Pleasanton, CA)

- Implemented new features on admission statistics reporting, using LAMP Stack and JQuery, to improve high school counselors' workflow
- Extended the SQL database and the UI to support custom GPA types and custom admission statistics for each client

Science Division Student Representative *August 2016 – Present*
Campus Curriculum Committee (Grinnell, IA)

- Provided recommendations for and oversight of the curricular program and vision of the college
- Led an initiative on expanding interdisciplinary coursework and research among students and faculties

Teaching Assistant *February 2015 – May 2017*
Physics Department (Grinnell, IA)

- Mentored General Physics students, graded their work, and discussed teaching strategies with professors
- Assisted more than 100 hours of lab by setting up equipment, explaining procedures, and troubleshooting

RESEARCH EXPERIENCE

Research Assistant *May – August 2016*
Solid State Physics Lab (Grinnell, IA)

- Synthesized new rare-earth intermetallic single-crystals using the flux method (Presented at the Midstates Consortium)
- Developed a Python program to analyze and visualize the magnetic susceptibility and electrical resistivity data

Research Intern *October – December 2012*
*RF & Microwave Lab - National Metrology Center (*Singapore)

- Studied high-precision measurements and the construction and maintenance of standards
- Automated data collection and processing from atmospheric sensors though LabVIEW programming

ACTIVITIES

- Facilitated a 1-week hiking and mountaineering expedition for 20 students in the Indian Himalayas (June 2012)
- Taught underprivileged middle schoolers English and helped build a local library in Nanchang, China (May 2012)