KHOA HO

(641) 260-6823 | 1115 8th Ave, Grinnell, IA 50112 | hokhoa@grinnell.edu |GitHub/LinkedIn: khoa-ho

EDUCATION

Grinnell College *Expected May 2018*

B.A., Double Major in Physics/Mathematics, Minor in Neuroscience Grinnell, IA

- **GPA:** 3.7 / 4.0 (Dean's List, Major Honor Track)
- **Selected coursework**: Quantum mechanics, Computational Physics, Object-Oriented Design, Analysis of Algorithms

PROJECTS

Deep Learning *April – September 2017*

- Classifying household object images in the CIFAR-10 dataset using Convolutional Neural Networks (CNN)
- Applying Sequence-to-Sequence model to translate English to French
- Generating Simpson TV script with Long Short Term Memory (LSTM) networks
- Generating hand-written digits and celebrity faces using Deep Convolutional Generative Adversarial Network (DCGAN)

PROGRAMMING PROFICIENCY

- **General:** Java, C, Python, MATLAB, MySQL, JavaScript
- **Machine Learning:** NumPy, Pandas, Scikit-Learn, TensorFlow, Keras, Google Cloud, AWS

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 – November 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

Research Intern *November 2011 – February 2012*

Nanomaterials Research Lab - National University of Singapore (Singapore)

- Investigated how laser pruning and the addition of quantum dots affect CdSSe nano-rods and nano-belts
- Examined optical and morphological changes using PL and Raman spectroscopy and scanning electron microscopy

ACTIVITIES

- Led a 1-week canoeing trip for 12 students in Buffalo River, Arkansas
- Facilitated a 1-week hiking and mountaineering expedition for 20 students in Indian Himalayas
- Taught underprivileged middle schoolers English and helped build a local library in Nanchang, China