

# Khoa Ho

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## EDUCATION

### Grinnell College (GC)

Grinnell, IA

*B.A., Double Major in Physics and Mathematics, Minor in Neuroscience*

*Expected May 2018*

- **GPA:** 3.72 / 4.00
- **Honors:** Dean's List (3 out of 5 semesters), Major Honor Track

## PROJECTS

### Deep Learning (GPU-accelerated TensorFlow, Numpy, Google Cloud Platform)

April – September 2017

- Classifying household object images in the CIFAR-10 dataset using Convolutional Neural Network
- 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

## WORK & LEADERSHIP EXPERIENCE

### College Kickstart

Grinnell, IA

*Full Stack Development Intern*

*May – August 2017*

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

### GC Campus Curriculum Committee

Grinnell, IA

*Student Representative of the Science Division*

*August 2016 – Present*

- 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

### GC Physics Department

Grinnell, IA

*Teaching/Lab Assistant*

*February 2015 – Present*

- 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

### GC Student Government Association (SGA)

Grinnell, IA

*Residence Hall Cluster Senator*

*September 2015 – December 2016*

- Served and represented 4 residence halls, housing over 200 students, at the Campus Council
- Wrote, debated, and enacted SGA's legislation and helped allocate a 6-figure annual budget for events

## RESEARCH EXPERIENCES

### GC Solid State Physics Lab

Grinnell, IA

*Research Assistant*

*May – August 2016*

- Worked in a team to synthesize new rare-earth intermetallic single-crystals using the flux method
- Wrote a Python program to analyze and visualize magnetic susceptibility and electrical resistivity data

### RF & Microwave Lab - National Metrology Center

Singapore

*Research Intern*

*October – November 2012*

- Studied high-precision measurements and the construction and maintenance of standards
- Programmed in LabVIEW to automate data collection and processing from in-lab atmospheric sensors

### Nanomaterials Research Lab - National University of Singapore

Singapore

*Research Intern*

*November 2011 – February 2012*

- 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

## 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