

# MINH HOANG

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## SUMMARY

Highly technical scientist driven by curiosity with extensive domain knowledge ranging from in-vitro diagnostics (in both clinical/research settings) to the professional sports industry, mainly the NBA, which has made me comfortable with handling and leveraging data in different fields. Excited to learn new ways to take advantage of the continuing rapid growth of high performance computing to enable new applications of machine learning.

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## SKILLS

**PYTHON:** NumPy, pandas, SciPy, scikit-learn, Tensorflow, Keras, Selenium, bokeh, matplotlib, seaborn, Jupyter Notebook, Dash, Flask

**R:** bioconductor, ggplot2, plyr, shiny

**LINUX:** bash, vim

**GIT:** GitHub

**CLOUD COMPUTING:** AWS, gcloud

**OTHER:** C++, OpenCV, SQL, MongoDB, PostgreSQL, RDS, S3, CloudFront, Heroku

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## PROJECTS

### NBA Advanced Stats Dashboard

Feb 2018

- Web application that actively calculates both team and individual player advanced statistics for display on an interactive dashboard during live NBA games.
- Live data is streamed from the stats.nba.com API into an ETL pipeline built from scratch using Python, the dashboard is built using Dash, and is deployed on Heroku.

### Game of Thrones ConvNet

Sep 2017

- Built a convolutional neural network with Keras to identify images with Game of Thrones related content for avoiding spoilers on social media.
- Trained the model on an EC2 instance (Nvidia Tesla K80) from AWS with images scraped from Instagram's API in combination with data augmentation.
- Achieved 81% accuracy of identifying Game of Thrones related content.

### Total Rickall RNN

Oct 2017

- Built a character level recurrent neural network (specifically LSTM) to generate story scripts from the popular TV show Rick and Morty.
- The model was trained on a gcloud compute instance (Nvidia Tesla K80) using episode scripts from every season of Rick and Morty.

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## EXPERIENCE

### Sportradar, NBA Scout, Oakland, CA

Oct 2016 - Current

- Attend Golden State Warrior home games. (Season credentialed for 2016-2017, 2017-2018)
- Track player movement data and statistics using Scouting Application developed by Sportradar.
- Maintain a scout rating of 4.9 out of 5.0, measured by quality and accuracy.

### Roche Molecular Systems, Scientist II, Clinical Operations, Pleasanton, CA

May 2016 - May 2017

- Performed on-site clinical studies for testing instrument/assay performance validation, optimization, and/or comparison, while strictly following study protocols/testing practices for FDA submission.
- Collaborated with System Support Engineers and Field Application Scientists to conduct official operator training at external clinical sites as an expert on the cobas 6800/8800 fully automated system.
- Developed Zika PCR assay and approved by FDA in 6 weeks, which became the primary assay used to screen blood donations for Zika across the U.S.

### Golden State Warriors, Head Statistician, Santa Cruz, CA

Nov 2015 - Apr 2017

- Tracked live game statistics using NBA IDS Platform for the Golden State Warriors' Developmental League Affiliate team.
- Compiled box scores, play-by-plays, and shot charts for media/coaching staff.
- Recognized by the NBA for back to back seasons (14-15, 15-16) of 100% accuracy of statistics.

### Roche Molecular Systems, Scientist I, Research (Nucleic Acid Purification/qPCR), Pleasanton, CA

Nov 2014 - Apr 2016

- Designed and performed experiments for the optimization of new applications and protocols for automated nucleic acid purification using the Roche MagNA Pure 96 platform.
- Analyzed experimental results and construct effective data graphics for team meetings and presentations for business groups.

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## EDUCATION

UCLA, B.Sc. Biology

2012

Udacity, Machine Learning Engineer Nanodegree

2017

John Hopkins University, Data Science Specialization

2016