16936 Bollinger Drive hsinmao@maoshouse.com Pacific Palisades, CA 90272

(310) 562-3016

May 2012

**Education** 

**University of Southern California** Los Angeles, CA, USA

Master of Science in Computer Science

May 2017 Urbana, IL, USA

University of Illinois at Urbana-Champaign Master of Science in Financial Engineering

(GPA: 3.34/4) December 2013

University of Illinois at Urbana-Champaign

Urbana IL, USA

Bachelor of Science in Electrical Engineering (GPA: 3.36/4)

**Related Coursework:** 

Introduction to Computer Networks **Financial Computing** Analysis of Algorithms Machine Learning **Data Structures** Computer Engineering

**Skills** 

**Programming:** C++, C#, Visual Basic, Java, Python, Ruby **Database: SOL** Research: Matlab, R Tools: Git

**Professional Experience** 

**Eagle Seven Trading** Chicago, IL, USA

Associate Trader February 2014 – December 2014

Managed positions of trading portfolios in a fast-paced environment to optimize for risk and performance under different market conditions.

Conducted research for trading strategies using R and Bloomberg market data.

Developed utility to estimate profit and loss in C#.

## Pictet & Cie (Europe) S.A., Hong Kong Branch

Discretionary Portfolio Management Intern

Hong Kong, China May 2013 – August 2013

Developed software tools to back-test various figures of value-at-risk.

Determined regression factors for the group's actively managed portfolio using a large database of historical values.

- Explored various different factors in a multivariate regression in order to capture price momentum and portfolio performance indicators.
- Implemented Monte-Carlo simulation to forecast day-to-day portfolio performance.

**Rogers Research Group** 

Urbana, IL, USA

Undergraduate Research Assistant

June 2011 – January 2012

- Worked extensively in cleanroom facilities to fabricate semiconductor devices for the Electronic Fly-Eye project.
- Attained proficiency in laboratory procedures and equipment use.

Good Mind Industries Co., Ltd.

Kaohsiung, Taiwan June 2010 – July 2010

Validated set-top box samples before shipment to clients.

Designed and wrote product related documents.

**Projects** 

Intern

Maoshouse Chicago, IL, USA

May 2014 – September 2014 Party Tracker

Published a Windows Phone 8.1 application written in C# that utilizes geolocation and Bluetooth to allow users to track a group of selected peers.

Nanex, LLC Urbana, IL, USA

**Practicum Project** August 2013 – December 2013

- Wrote multi-threaded C++ programs to parse large sets of exchange information.
- Filtered and analyzed dataset in R to identify extraneous market events such as over-quoting and exchange movements.

**CS 446 Machine Learning** 

Urbana, IL, USA

Partly Sunny with a Chance of Hashtags

August 2013 – December 2013

Conducted Twitter text classification and sentiment analysis using Python and Scikit-Learn.

**ECE 445 Senior Design Project** Improvement to Wake-on-LAN

Urbana, IL, USA August 2011 – December 2011

Won the iteration's ECE 445 Hall of Fame: Area Award in Networking.

Developed and wrote a software-based Wake-on-LAN solution that monitors and routes network traffic to sleeping computers.