

# Michael Sze-Yu Cheung

San Francisco, CA

Michael.SzeYu.Cheung@gmail.com

732-447-7767

## TECHNICAL WORK HISTORY

- **Coyne** San Francisco, CA  
• **Co-Founder & CTO** Apr 2018 – Current
  - Analyzed live and historical exchange rates while factoring sources of market friction to leverage market making and arbitrage opportunities and simulate forex binary options
  - Generated real time metric visualizations (e.g. volume, profit, slippage) for investors
  - Sourced and advised engineers who integrated exchange APIs
  - Automated the provisioning and deployment process on AWS
  - Reduced staleness by using a network of slaves and async processing
- **Apollo.io** San Francisco, CA  
• **Software Engineer** Mar 2017 – Apr 2018
  - Led a team of engineers to develop a predictive scoring system that ranks companies by how likely they will close a deal with our clients
  - Handled candidate sourcing, conducted interviews, and streamlined outreach methodology. Recruited a key engineer that filled a major skill gap on our team.
  - Increased sales and retention by integrating with a popular marketing site's API
- **Google (YouTube)** Mountain View, CA  
• **Software Engineer** Feb 2015 – Mar 2017
  - Reduced CPU usage by 75% by caching a critical data serving platform
  - Rectified bad metadata, which saved at least one of our partners 30 hours/week of work
- **Naval Research Laboratory - Applied AI Researcher** May 2014 – Aug 2014
  - Developed intelligent control systems for autonomous underwater vehicles
- **Los Alamos National Lab - Computational Earth Scientist** Jan 2011 – June 2011
  - Developed a post-processing tool for debugging, interpreting, and visualizing simulations that is still used and maintained to this day, eight years later.

## INDEPENDENT PROJECTS

- Created a food web simulation to test a variety of predator/prey strategies. These include hard coded, reinforcement learning, and neural net strategies. (2017-2018)
- Developed an intelligent agent that uses computer vision to play a mobile game (2014-2017)
- Designed a computer vision algorithm to track entity positions in an MMORPG (2011-2013)
- Created a Q-learning agent that continuously tests and optimizes attack targets (2012)

## SKILLS

- **Programming Languages:** Java, Kotlin, Ruby, C++, Python, Javascript
- **Frameworks/Technologies:** React, Redux, AWS (EC2, S3, CodePipeline), Ruby on Rails, MongoDB, Elasticsearch, Protocol Buffers, BigTable, Spanner, MapReduce, Flume

## EDUCATION

- **Lehigh University - Fellowship in Computer Science - 3.90/4.00** 2013 - 2014
- **Elizabethtown College - BS in Math and Physics - 3.94/4.00** 2009 - 2013