# Xinyu (Ivy) Li

72 Morris St, Jersey City, NJ • 718-406-6863 xl2363@columbia.edu • ivylee.github.io

#### **EXPERIENCE**

Turing Labs Remote

Lead Machine Learning Engineer

Dec 2020 - Current

- Built Turing Lab's probablistic machine learning stack from scratch as the first ML Engineer.
- Leading a team of 6 engineers in the design and development of new ML capabilities resulting in a 50% improvement in project delivery time and million-dollar contracts.
- Developed and maintained relationships with key stakeholders, including product, sales, web engineering and customer success teams.

Studio Xolo Jersey City, NJ

Machine Learning Consultant

Sept 2019 - Current

- Implemented engineering best practices in a DARPA funded research project Multi-agent reinforcement learning for economic mechanism design.
- Developed real-time object detection system on drones.
- Developed documentary footage editing software with visual search component.

### Phiar Technologies (Acquired by Google)

Redwood City, CA

Cofounder & CTO

June 2018 - Aug 2019

- Participated in Y Combinator 2018 summer batch. Raised seed round funding of \$2.5 million.
- Led agile development processes, made several key hires, managed a growing team of research and production engineers.
- Designed and implemented deep learning research and deployment pipeline.
- Developed efficient driving scene segmentation models running more than 30 frames per second on iOS devices.

Shutterstock Inc.

New York, NY

Data Scientist Jan 2015 - May 2018

- Prototyped, designed and implemented image auto-tagging feature in computer vision REST API service in Python, which improved weekly content submission by 62% on iOS platform and 70% on Android platform.
- Designed and implemented AWS ECS-based visual search system consists of an API interface to a deep neural network model, a high performance search engine written in C++, an orchestration layer in Python, in conjunction with real-time and batch indexing pipelines via RabbitMQ.
- Created Python REST API backend for a Chrome plugin prototype which allows users to find visually similar images on Shutterstock from any image on any website, won company-wide hackathon in 2017.
- Developed an algorithm in Python to cluster visually similar new images, won company-wide hackathon in 2016.

Truveris New York, NY

Data Scientist Aug 2014 - Jan 2015

• Developed Truveris National Drug Index, a volume weighted price index summarizing the average price of prescription drugs in the US over a period of time.

Socure New York, NY

Data Scientist Jan 2014 - July 2014

• Researched and implemented low latency face similarity comparison algorithm in Socure's identity verification REST API service written in Java/Scala.

## **PATENTS**

- Computer-vision based positioning for augmented reality navigation. U.S. Patent 10,871,377.
- Mobile real-time driving safety systems and methods. U.S. Patent 10,573,183.
- Augmented reality navigation systems and methods. U.S. Patent 10,495,476.
- Migrating image histories between different databases. U.S. Patent 10,585,953.
- Analyzing facial recognition data and social network data for user authentication. U.S. Patent 9,147,117.

## **EDUCATION**

Columbia University

New York, NY

MA in Statistics Feb 2014

Guangdong University of Foreign Studies Guangzhou, China

BS in Mathematics and Applied Mathematics

May 2012