#### **EDUCATION**

## Purdue University, West Lafayette, IN, USA

Aug. 2021 – Now

Ph.D., Computer Science, GPA: 4.0/4.0

Advisor: Chunyi Peng

# Columbia University, New York, NY, USA

Aug. 2019 - Feb. 2021

M.S., Data Science, GPA: 3.943/4.0

Columbia University, New York, NY, USA

Jan. 2018 - May. 2018

Exchange Student, Statistics, GPA: 3.917/4.0

Wuhan University, Wuhan, China

Sep. 2015 - Jul. 2019

B.E., Printing Engineering, GPA: 3.87/4.0 (Top 1)

## Professional Experience

#### Alibaba Cloud, Hangzhou, China

Mar. 2021 - Jul. 2021

Algorithm Engineer (Full-time)

• Designed anomaly detection algorithms for 130 min KPIs data based on LSTM with 63% acc.

#### Tencent (CSIG), Shenzhen, China

Jun. 2019 – Jul. 2019

Big Data and Algorithm Application Intern

• Created an automatic grading system for high school compositions with Transformer.

#### **PUBLICATIONS**

- [1] J. Guo, S. Xia (co-primary author), and C.Peng. "OPA: One-Predict-All For Efficient Deployment", in IEEE INFOCOM 2023,
- [2] J. Guo, <u>S.Xia</u>, and C.Peng. "VPPlus: Exploring the Potentials of Video Processing for Live Video Analytics at the Edge", in IEEE IWQoS 2022
- [3] Z. Zhu, X. Li, Z. Wang, L. He, B. He, <u>S. Xia</u>. "Development and Research of a Multi-Medium Motion Capture System for Underwater Intelligent Agents", Appl. Sci. 2020, 10, 6237.
- [4] F. Li, B. He, G. Li, M. Ma, J. Li and <u>S. Xia</u>. "Real-time CAD-level surface of revolution reconstruction on visual slam", in CAC 2020.

## RESEARCH EXPERIENCE

#### Purdue University, Research Assistant

West Lafayette, IN, USA

Advisor: Prof. Chunyi Peng

- Built a prototype for autonomous drone delivery.
- Designed a deep learning system with one trained super-network and select its sub-network to fit the target deployment scenario for computer vision applications [1].
- Designed a system to fulfill the potential to compress video while retaining analytical accuracy[2].

## Columbia University, Research Assistant

New York, NY, USA

Advisor: Prof. Chong Li

- Built a platform to use automatic text segmentation and summarization to extract outlines for online courses.
- Designed a system to allow multiple mobile devices to collaboratively fetch content from the Internet.

### Tongji University, Research Assistant

Shanghai, China

Advisor: Prof. Bin He

- Designed a system to do 3D reconstruction and movement tracing for underwater agents [3].
- Implemented 3D reconstruction of revolution such as vases [4].

#### Columbia University, Team member

New York, NY, USA

Advisor: Prof. Pierre Elias and Prof. Adler Perotte

• Analyzed electrocardiogram using deep learning models for the diagnosis of cardiac amyloidosis.

SKILLS

• Programming (C, C++, Python, R, html5, Java), Databases (SQL Server, Spark), Tableau, Tensorflow, Pytorch, Flask, Gunicorn, Docker.