# George Pu

CV

#### Education

Aug 2017 — B.S. Computer Science, *University of Florida*, Gainesville, 3.9/4.0.

May 2021 Minor in Mathematics

#### Publications

Dec 2020 Yanlin Zhou\*, **George Pu**\*, Xiyao Ma, Xiaolin Li, Dapeng Wu. "Communication-Efficient Federated Learning via Dataset Distillation". *2020 NeurIPS Workshop on Scalability, Privacy, and Security in Federated Learning (SpicyFL).* 

Nov 2019 Yanlin Zhou\*, Fan Lu\*, **George Pu**\*, Xiyao Ma, Runhan Sun, Hsi-Yuan Chen, Xiaolin Li. "Adaptive leader-follower formation control and obstacle avoidance via deep reinforcement learning". *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*.

#### **Preprints**

Mar 2021 **George Pu**, Yanlin Zhou, Dapeng Wu, Xiaolin Li. "Client and Server Averaging for Federated Learning". *arXiv:2103.11619*.

Sep 2020 Yanlin Zhou\*, **George Pu**\*, Xiyao Ma, Xiaolin Li, Dapeng Wu. "Distilled One-shot Federated Learning". *arXiv:2009.07999*.

### Experience

Jan 2018 — **Research Assistant**, *NSF Center for Big Learning*, Gainesville.

May 2021 • Performed basic research in the fields of deep learning and artificial intelligence.

• Authored multiple papers submitted/published at top conferences: ICRA, IROS, NeurIPS.

Funded for portions of my junior year and through the entirely of my senior year.

May 2020 — **Software Developer/Engineer Intern**, *Amazon*, Virtual (Florida).

Aug 2020 • Invented a new service that gates when Marketplace seller debts are charged

Designed a new dashboard capable of adding/removing charge overrides.

 Documented use of new technologies—ECS, VPC, DynamoDB—to help team with future development.

May 2019 — **Software Developer/Engineer Intern**, *Amazon*, Seattle.

Aug 2019 • Engineered an API to selectively display Marketplace transactions stored in DynamoDB.

Cut time needed to debug seller tickets by >50% through the creation of a new dashboard.

• Implemented pagination enabling the service to handle >100,000 items.

Sep 2017 — **Research Volunteer**, *University of Florida*, Gainesville.

Nov 2018 • Performed applied research in the fields of mathematical biology.

• Helped fit multi-compartment epidemiological models to Leishmaniasis data.

#### **Teaching**

Spring 2021 Teaching Assistant for CIS4930 Natural Language Processing under Peter Dobbins

Fall 2020 Teaching Assistant for COT3100 Discrete Structures under Peter Dobbins

Spring 2020 Teaching Assistant for CIS4301 Information and Database Systems 1 under Peter Dobbins

## Personal Projects

#### Feb 2020 DizViz, VR, Google Cloud.

- Developed a system for creating 3D models of disasters using a pipeline of Google Cloud functions for scraping images from social media.
- o Won JP Morgan Best Hack for Disaster Relief out of 118 other teams at SwampHacks VI.

#### Oct 2019 Time Tracker, React, Google Cloud.

 Built a single page web application using React to display time tracking data stored in Cloud Firestore.

#### Oct 2018 Text Style Transfer, PyTorch, Flask.

 Created a website that applied machine learning research to generate sentences with the content of one sentence and the style of another.

#### Feb 2018 **OpenDoors**, *PyTorch*, *Android*.

- Developed an Android app that assists visually impaired individuals find doors by training an >80% accurate neural network on a custom dataset of interiors.
- Won Infinite Energy Best Hack out of 79 other teams at SwampHacks IV.

#### **Technical Skills**

Basic Intermediate Advanced C, C++, React, TensorFlow Java, JavaScript, SQL Python, PyTorch

#### **Awards**

Aug 2020	University Scholars Program	University of Florida
Feb 2020	JP Morgan Best Hack for Disaster Relief	SwampHacks VI
Aug 2019	University Scholars Program	University of Florida
Feb 2018	Infinite Energy Best Hack	SwampHacks IV