# XIANGYU (BECKY) PENG

(650)-382-9420  $\Leftrightarrow$  xpeng62@gatech.edu  $\Leftrightarrow$  xiangyu-peng.github.io Research area: Natural Language Generation, Reinforcement Learning,

Knowledge Graph, Game AI, Deep Learning

## **EDUCATION**

# Georgia Institute of Technology, Atlanta, Georgia

Aug 2019 - present

PhD in Machine Learning, GPA: 4.00/4.00, Advisor: Dr. Mark O. Riedl

Relevant Coursework: Reinforcement Learning; Stochastic Process; Math foundation of Machine Learning;

Non-linear Optimization; Advanced Algorithm; Natural Language Processing

Stanford University, Stanford, California

Sep 2017 - Jun 2019

M.S. in Structure Engineering, GPA: 4.00/4.30, Advisor: Dr. Jack Baker

Relevant Coursework: Deep Learning; Convolutional Neural Networks for Visual Recognition; Machine

Learning; Data Mining and Analysis; Mining Massive Data Sets

Shanghai Jiaotong University, Shanghai, China

Sep 2013 - Jun 2017

B.S. in Civil Engineering, GPA: 3.95/4.00, Advisor: Dr. Lulu Zhang

Relevant Coursework: Data structure; Programming Abstractions in C++

#### **PUBLICATIONS**

## Detecting and Adapting to Novelty in Games

Peng, X., Balloch, J., and Riedl, M.

Submitted to Creativity and Robotics workshop at ICSR 2020

## Reducing Non-Normative Text Generation from Language Models

Peng, X., Li, S., Frazier, S. and Riedl, M.

Accepted by The 13th International Conference on Natural Language Generation (INLG 2020)

## Improving Neural Storytelling with Commonsense Inferences

Peng, X., Li, S., Wiegreffe, S.

Accepted by NeurIPS WiML workshop 2020

Effects of cross-correlated multiple spatially random soil properties on wave-induced oscillatory seabed response.

Peng, X.Y., Zhang, L.L., Jeng, D.S., Chen, L.H., Liao, C.C. and Yang, H.Q.

Applied Ocean Research (2017), 62, pp.57-69.

Wave-Induced Oscillatory Response in a Randomly Heterogeneous Seabed with Cross-correlated Soil Properties.

Peng, X.Y. and Zhang, L.L.

In The Twelfth ISOPE Pacific/Asia Offshore Mechanics Symposium. International Society of Offshore and Polar Engineers (2016).

## Wave-induced oscillatory response in a randomly heterogeneous porous seabed.

Zhang, L.L., Cheng, Y., Li, J.H., Zhou, X.L., Jeng, D.S. and Peng, X.Y.

Ocean Engineering (2016), 111, pp.116-127.

#### WORK EXPERIENCE

#### Graduate Research Assistant

 ${\rm Aug}~2019$  -  ${\rm Present}$ 

Human-Centered Artificial Intelligence And Entertainment Intelligence Lab

Atlanta, Georgia

- · Current project: Improvisational Reinforcement Learning In Open Worlds
- · Current project: Generating common sense stories between multiple characters
- · Previous project: Reducing Non-Normative Text Generation from Language Models

## **Data Scientist Intern**

Jun 2018 - Sep 2018

SunPower Corp.

San Jose, California

- · Exploring feature extraction of 1-second hot-spot cell test by conducting correlation analysis
- · Finding effective data representations and evaluation metrics for training neural networks of predicting hot-spot max temperature
- · Implementing automatic data recording and correlation analysis interface with python

## Research Assistant

Jun 2014 - Jun 2017

State Key Laboratory of Ocean Engineering of China

Shanghai, China

- · Exploring soil properties relationship in heterogeneous seabed and liquefaction depths under pressure
- · Developing a stochastic finite element model in MATLAB to integrat multiple spatially random soil property
- · Investigating the effects of negatively cross-correlated spatially random soil properties with data mining

## **SKILLS**

**Technical**: Natural Language Processing, Reinforcement Learning, Machine Learning, Knowledge Graphs, Predictive Analytics, Computer Vison

Programming: C/C++, Python, R, SQL, MATLAB, Julia

Tools and Framework: Pytorch, Tensorflow, Git, scikit-learn, Numpy, Pandas, nltk

#### **AWARDS**

Stewart Fellowship, Georgia Institute of Technology	Aug~2019
Outstanding Graduates of Class 2017, Shanghai Jiaotong University	Jun 2017
National Scholarship of China (Top 1%), Shanghai Jiaotong University	Jan 2017
Baogang Scholarship of China (Top 0.5%), Shanghai Jiaotong University	Oct 2016
Merit Student of Shanghai Jiao Tong University, Shanghai Jiaotong University	Jun 2016
Merit Volunteer of Shanghai Jiao Tong University, Shanghai Jiaotong University	Jun 2015