ZHENGPING ZHOU

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8# Zijing Student Apartment ◇ Tsinghua University ◇ Beijing 100084, P.R. China

EDUCATION

Tsinghua University, Beijing, China *2015.8 - 2019.7(Expected)*
B.Eng. Department of Computer Science and Technology (expected)

Stanford University, CA, USA *2018.7 - 2018.8*
Research Assistant in the Department of Computer Science
Member of the Chinese Undergraduate Visiting Research (UGVR) Program

GRADES

GPA: 3.85/4.00, ranking 2/140
Relevant Courses:

Linear Algebra(1)&(2)	A+
Probability and Statistics	A+
Numerical Analysis	A
Fundamentals of Computer Graphics	A
Artificial Intelligence: Technology and Practice	A
Artificial Neural Network and Deep Learning	A

PUBLICATIONS

What and Where: A Context-based Recommendation System for Object Insertion.
Song-Hai Zhang†, **Zhengping Zhou***, Bin Liu, Xin Dong, Dun Liang, Peter Hall, Shi-Min Hu.*
IEEE Transactions on Image Processing **(2018, under submission)**.
*Co-first authorship; † Supervisor.

RESEARCH EXPERIENCE

Tsinghua University, Beijing, China 2018.9 - 2018.11
Tsinghua-Tencent Joint Laboratory, Department of Computer Sceience *Research Assistant*
Supervisor: Songhai Zhang, Peter Hall, Shimin Hu

· **Project: What and Where: A Context-based Recommender System for Object Insertion**
· Proposed a novel research topic consisting of two dual tasks: object recommendation and scene retrieval.
· Implemented the unsupervised algorithm based on object-level context, and achieved significant improvements on performance and speed; Established a newly annotated test set, and designed task-specific metrics for benchmarking; Conducted experiments with detailed contrastive analysis.
· Finished the paper independently from scratch, and made a submission to IEEE Transactions on Image Processing (TIP) as co-first author.

Stanford University, Stanford, CA, USA 2018.7 - 2018.8
Ronald Fedkiw's group, Department of Computer Sceience *Research Assistant*
Supervisor: Ronald Fedkiw

· **Project: Marker-based Body and Garment Reconstruction from Multiview RGB videos**
· Established a computer vision pipeline using a setup of three RGB cameras to reconstruct 3D models for both the person and the worn garment, constrained by on-garment markers.

· Reconstructed accurate models for the garment and the person separately, by combining pose detection and shape optimization, with both quantitative and qualitative evaluation.
· Conducted a quasi-Newton optimization based on marker tracking and level set constraints, resulting in the final 3D model of a person wearing a smoothly deformed garment.

Google, Beijing, China 2017.7 - 2017.9
Supervisor: Yan Li, Jie Shao *Engineering Practicum Intern*

· **Project: Bad Encoding Detection by Text Classification and Language Modeling**
· Developed a well-engineered system to detect broken texts in large-scale multilingual data.
· Proposed a hybrid model consisting of a supervised text classifier (Char-CNN) and an unsupervised language model (Bigram), achieving high precision on production data.
· Approved by the hiring committee for a return intern offer.

Tsinghua University, Beijing, China 2017.10 - 2018.4
Natural Language Processing Laboratory, Department of Computer Science *Research Assistant*
Supervisor: Zhiyuan Liu

· **Project: Relation Extraction on Free Text for Knowledge-based Question Answering**
· Explored combining structured knowledge base and unstructured free text for question answering.
· Processed and manipulated large-scale datasets (e.g. FREEBASE, WIKIPEDIA, etc.) using SPARQL.
· Built an end-to-end memory network for answer candidate selection, and incorporated text-based relation extraction techniques as an auxiliary module.

HONORS

2018 Fellowship of Chinese Undergraduate Visiting Researcher (UGVR) Program (Top 18 in China)
2018 Qualcomm Scholarship (Awarded to students with excellent scientific potential, top 33/3300)
2018 China Computer Federation (CCF) Elite Collegiate Award (Top 73 in China)
2018 Excellent Academic Performance Scholarship (Top 20/140)
2017 Outstanding Comprehensive Performance Scholarship (Highest Honor in Dept. of CS)
2016 Outstanding Comprehensive Performance Scholarship (Highest Honor in Dept. of CS)
2015 Freshman Scholarship (Top 150/3300)

TECHNICAL STRENGTHS

Platforms	Linux, Windows
Programming Languages	Proficient with `C/C++`, `Python`, `Java`
	Familiar with `MATLAB`, `Lua`, `Bash`, `Perl`, LaTeX, `HTML/CSS/JavaScript`
Research Skills	Proficient with `TensorFlow`, `PyTorch`
	Familiar with `Caffe`, `Keras`, `Torch7`
Software Skills	Photoshop, Illustrator, Blender, Maya

LANGUAGE SKILLS

Language	Chinese, English
TOEFL iBT	112/120 (Reading 30, Listening 29, Speaking 23, Writing 30)
GRE	331/340 + 4.0/6.0 (Verbal 162, Quantitative 169, Writing 4.0)

EXTRA-CURRICULAR ACTIVITIES

2015 Designed and ordered class uniform for over 30 classmates.
2016 Leaded the team of drafting, shooting and post-processing for microfilm *Hi, Siri.*
2016 Designed 10 hand-painted countdown posters for the Student Festival with high praise.