# Xiangyue Zheng

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## Education

#### The George Washington University (Washington, D.C.)

Expected May 2019

School of Engineering & Applied Science

Master of Science in Computer Science - GPA 3.85(top 15%)

Indented concentration: Computer Graphics, Web Technology

#### Sun Yat-Sen University (Guangzhou, China)

June 2016

School of Data & Computer Science

Bachelor of Science in Computer Science - GPA 3.5

### Skills

Languages: C/C++, PHP, Python, JavaScript, Matlab, HTML/CSS

Tools: Mysql, Git, Redis, thrift, HDFS, Kafka, OpenGL, NPM, Docker,

NodeJs, CMake, VUE, Django, CodeIgniter

Knowledge: Algorithm, Operating System, Computer Network, Computer Graphics,

Machine Learning, Data Compression, Web Technique

## Projects

#### Graphics Renderer (Graphics, Animation, C++)

Feb 2018 - Present

- Developed a <u>basic renderer</u> using perspective transform, Z-buffer, Scanline algorithms. Implemented illumination models, texture mapping and depth of field effect
- Designed an <u>animation tool</u>. Implemented spline, Euler angle, quaternion, hierarchy object

#### Real-Time Face Slimming Filter

Present

## (Image processing, Machine Learning, Python)

• Avoided "sudden mutation problem" using image morphing, triangle interpolation, CNN based face detection

#### Image Compression Component (Algorithm, Math)

Jan 2017 - Apr 2017

- $\bullet$  Designed an image compression algorithm for self-organized network terminals based on discrete cosine transform
- Achieved compression ratio of 10 15, making it possible for selforganized network application to transfer images in good quality

#### Web Apps (PHP, Python, Javascript, HTML)

2016 - 2018

- · Technique People, a social media platform for technology transferring
- · Conference Booking, an internal meeting room reservation system
- Lypton Doc, a rich text editor
- Vocabulary Memory, an English learning tool

# Experience

#### ByteDance Software Engineering Intern

May 2018 - Oct 2018

 Efficiency increased by over 300% for "content audit assessment" by building an automated, standardized platform which connects HDFS infrastructure and audit platform. Completed 25% ahead of schedule