

Mike Zou

{ TECHNOLOGIST | VISUAL ARTIST | INQUISITIVE MIND }
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EDUCATION

GRINNELL COLLEGE

BA IN COMPUTER SCIENCE

CS major with strong involvement in Mathematics & Studio Arts
Expected May 2019 | Grinnell, IA
Cum. GPA: 3.97 / 4.00

Major GPA: 4.00 / 4.00

Dean's List (All Semesters)

RAFFLES INSTITUTION

Grad. Dec 2014 | Singapore

LINKS

MySite:// mikezou.com

Github:// github.com/Mizkoeu

LinkedIn:// linkedin.com/in/mizkoeu

COURSEWORK

Functional Programming
Algorithms & OO Programming
Theory of computation
Computer graphics
Computer vision & Digital post-production
Computer Architecture
Intro to Operating Systems

SKILLS

PROGRAMMING

Over 5000 lines:

Java • C • C# • Python • JavaScript

Swift • \LaTeX

Over 1000 lines:

C++ • R • Matlab • Scheme

Familiar:

GLSL • Shell script • Stata

TECHNOLOGIES

Operating Systems:

Linux/Ubuntu

Web Development:

HTML5 • CSS • React.JS • Node.JS

Database/Data warehouse:

ElasticSearch • MongoDB • MySQL

Statistics & Data Visualization:

RStudio • ShinyApps • Minitab • Excel

Game & 3D Modeling:

Unity3D • Blender • Sketchup • 3ds Max

Video Editing/VFX:

Adobe Premiere • Photoshop

Aftereffects • Illustrator

LANGUAGES

Chinese (Mandarin) • English • French

EXPERIENCE

GOLDMAN SACHS | ENGINEERING SUMMER ANALYST

June 2018 – Aug 2018 | Hong Kong

- Built and deployed a real-time monitoring system in QA for server connectivity with stock/futures exchanges in all markets within APAC region;
- Enriched log data indexed in ElasticSearch cluster using Python and created an intuitive React app for dashboard visualization and alerts for the SRE team.

GRINNELL IMMERSIVE EXPERIENCES LAB | VR DEVELOPER

May 2018 – Present | Grinnell, IA

- Working on object manipulation and teleportation in a VR experience aiming to educate players on slave history at the Uncle Sam Sugar Plantation in Louisiana.

GRINNELL COLLEGE SUMMER UNDERGRADUATE RESEARCH |

UNITY GAME DEVELOPER & LEAD ARTIST

May 2017 – Aug 2017 | Grinnell, IA

- Developed a 2D statistics learning game titled "Epidemic" from scratch in Unity;
- Designed game architecture with OO principles and implemented a modified SIR epidemiological model with inverse binomial distribution in C#;
- Built a back-end server end-point on AWS EC2 with MongoDB database support for user data collection and visualization on ShinyApps.

GRINNELL APPDEV | LEAD FRONT-END ENGINEER

Aug 2016 – Present | Grinnell, IA

- Designed and developed the front-end features and components for the Grinnell News app used by over 1600 students to browse college publications;
- Conducted regular code reviews, discussed data integration and designed custom publication APIs with back-end team in weekly meetings.

GRINNELL COMPUTER SCIENCE & PHYSICS DEPARTMENT |

TEACHING ASSISTANT

Aug 2016 – Present | Grinnell, IA

- Mentored students on coding problem sets, debugging sessions and conducted weekly conceptual reviews for the intro CS course sequence;
- Guided students through modern physics lab sessions, projects and assisted professors with quantitative analysis of experimental results.

PROJECT EXPERIENCE

CAMERA TRACKING & POST-PRODUCTION PROGRAM |

Aug 2017 – Dec 2017 | Aquincum Institute of Technology, Budapest

- Implemented image processing programs in C++ with linear/nonlinear filters and Harris corner detection;
- Built real-time tracking program that computes optimal homography matrices between frames, removes sky using alpha matte keys and fits 3D graphics onto the footage to realize various visual effects.

WEBGL 3D GAME PROJECT |

Aug 2017 – Dec 2017 | Aquincum Institute of Technology, Budapest

- Individual project on exploring graphics pipeline and 3D scene rendering;
- Developed an adventure game with mesh objects, lighting, textures, custom shaders and ray-tracing in JavaScript and GLSL Shading language;
- Find out more on my repository github.com/Mizkoeu/3D_Game_Graphics



Contact me if you find me interesting!