

Tianhao (Mike) Zou
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EDUCATION

Grinnell College

Major: Computer Science and Mathematics

Grinnell, IA

Expected May 2019

- **Cumulative GPA:** 3.98/4.00
- **Selected Coursework:** Theory of computation, Computer graphics, Computer vision & Digital post-production, Data structures, Algorithms and Object-Oriented Programming, Intro to Operating Systems.

TECHNICAL SKILLS

Programming Languages: Java; C; C#; C++; JavaScript (jQuery); Python; GLSL; Scheme; Swift; Node.JS.

Natural Languages: Mandarin (native); English (fluent); French (intermediate); Korean/Hungarian (novice).

Technologies: Linux/Ubuntu (Extensive experience with OS); HTML, CSS (Web development); MongoDB, MySQL (Database); Word, Excel (Data collection); Minitab, ShinyApps (Statistical data visualization); Adobe Premiere, Photoshop, Aftereffects (Video editing, VFX); Sketchup, 3ds Max (3D Modeling).

RELEVANT EXPERIENCE

Unity Game Developer

Summer computer science research at Grinnell College

Grinnell, IA

May 2017–August 2017

- Developed a prototype 2D game “Epidemic” aimed at statistics education in Unity from scratch;
- Implemented the SIR epidemiological model with probabilities and 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 (a functionality built for classroom settings).

iOS Front-end Engineer

Grinnell AppDev Student Organization

Grinnell, IA

August 2016–Present

- Designed and developed the Grinnell News app with front-end interactive features and UI modules;
- Conducted regular code reviews, discussed data integration with back-end team in weekly meetings.

Teaching Assistant

Grinnell College Computer Science & Physics Department

Grinnell, IA

August 2016–May 2017

- Mentored students on coding problem sets, debugging sessions and conducted conceptual reviews;
- Guided students through workshops, lab sessions and assisted professors with quantitative analysis.

Game Developer Extern

Scopely, Inc.

Culver City, CA

Mar 2016–April 2016

- Shadowed and assisted head of Engineering team with daily analytics and observed executive meetings;
- Interviewed game developers, technical artists on their work life, education background and career plans.

SELECTED COURSEWORK EXPERIENCE

WebGL 3D Game Project

Individual Project on graphics pipeline and rendering 3D scenes

Aquincum Institute of Technology, Budapest

August 2017–Present

- Developed an adventure game with mesh objects, lightings, shaders, ray-tracing in JavaScript and GLSL;
- The final project can be viewed on the repository https://github.com/Mizkoeu/3D_Game_Graphics.

Camera Tracking & Post-production Program

Project on feature tracking and applications in film visual effects

Aquincum Institute of Technology, Budapest

August 2017–Present

- 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.

LinkedIn www.linkedin.com/in/mizkoeu ; Github www.github.com/Mizkoeu