

Larry Zhao (Luolei) - Software Developer

WORK EXPERIENCE

Boeing Global Services - Flight Simulator Systems Engineer

August 2018 - Current

- Supported Flight Simulators for F-15, F-22, and F-16 Fighter Jets.
- Integrated hardware and software, coordinating networking, virtual disk systems, shaders, and projector controls.
- Coordinated with experts and professionals in a variety of fields utilizing consistent communication and extensive documentation.

Northwestern Research Computing - Visualization Developer

February 2016 - September 2017

- Contributed to the development of omegalib, a C++ based customized graphics library specialized for large 3D visualization displays, utilizing OpenGL and GLSL.
- Facilitated the development and support of Firefly, an interactive visualization application utilizing OpenGL parallelization for galaxy simulations.
- Pioneered the creation of a jQuery-based dynamic web interface for an Interactive 3D visualization displays at Northwestern's Center of Advanced Molecular Imaging (CAMI).
- Designed, implemented, and developed a variety of python web apps for the CAMI wall including 3D model viewers, galaxy viewers, video playback modules, and volume rendering applications.

Soar Technology Inc. - Software Engineer Intern

Summer 2017

- Developed interactive python-based data visualization web apps while adapting to rapidly changing client needs. Visualizations were presented at the iFEST 2017 conference.
- Researched and developed new means of categorizing student behavior in adaptive training simulations using logical AI programming concepts.

LEADERSHIP

Founder of "Pioneers of Interactive Entertainment"

- Launched the Premier Video Game Dev Club at Northwestern.
- Established an indie video game development community through regular mentorship, industry speakers, game jams and workshops events that attract upwards of 200 people.

Industry Relations Chair for IEEE Northwestern Student Chapter

- Spearheaded the establishment of the IEEE NU Project Showcase. Connects companies and ambitious students in a project-oriented networking event with over 40 annual participants.
- Strengthened the IEEE NU's "IE-Cubed" Technical Program. Mentored practical, project-oriented student groups that brought classroom concepts to the real world.

LINKS AND CONTACTS

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<https://github.com/DrDoak>

<https://www.linkedin.com/in/luoleizhao/>

614-707-3805

EDUCATION

M.S., Computer Science 2018

Northwestern University

GPA: 3.72/4.00

SKILLS AND SOFTWARE

- Professional Experience in C#, C++, Python, and Javascript.
- Extensive experience in data visualization and graphics often with extensive Shader use.
- Academic experience with functional/logical programming, machine learning and PostgreSQL

PROJECTS

Little Deity

- 'Metroidvania' Side-Scroller Showcase project made with Unity
- Created custom Scripting plugin for easy Game Cutscene creation with embedded Functional Language.

Quintessence

- Story based Unity project focused on dynamically constructed prefabs

Project Sol

- AI Research Project focused on NPC Knowledge Representation.

ADDITIONAL EXPERIENCE

- Freelance Video Game Artist specializing in 2D Technical Art and Sprite Animation.
- Teaching Experience. Instructor of Programming at St Louis Modern Chinese School.
- Experience in Agile and Scrum