## Luke Wilimitis

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**Objective** To create harmony between art and technology, one line of code at a time.

Education University of Illinois at Chicago

Aug '12 - May '16

Bachelor of Science in Computer Science Major GPA: 4.00 Cumulative GPA: 3.85

Relevant: Data Structures, Algorithms, Hardware Systems, Operating Systems, Artificial Intelligence, Mobile Interfaces, OOP, Applied Linear Algebra, Calculus I-IV

**Experience** Triggr Health - Software Engineer

July '17 - Present

Created mobile app enabling 1,000 at-risk users to send 100,000 messages/mo. Constructed multimedia content editors with animated interaction elements. Contributed to distributed priority queue powering mission-critical services. Collaborated with end users and internal user team to drive feature development. *JavaScript, Java, Objective C, NoSQL* 

**Apartments.com - Software Engineer** 

Feb '17 - July '17

Contributed to geospatial search interface used by 40 million unique visitors/mo. Created distributed messaging queue used internally across engineering teams. JavaScript, C#, SQL

**SWC - Software Engineer** 

Jan '16 - Feb '17

Developed interactive data visualizations for analyzing geospatial datasets. Interpreted and tuned visualizations with statistical and business teams. *Python, R* 

Northern Trust - Software Engineer (Contractor)

Aug '15 - Dec '15

Researched canvas methods to render high-volume interactive data visualizations.

**Projects** 

illumin8r - Model Renderer github.com/wilimitis/illumin8r

Sept '18 - Present

Supports photon mapping with caustic and global illumination maps [Jensen 96]. Supports importance sampling the modified Phong BRDF [Lafortune 94]. Supports adaptive bounding volume hierarchy acceleration structure [Kajiya 86]. *C++, glm* 

**Fragment Shader - Ray Marching** shadertoy.com/view/MltfR4 July '18 - Sept '18 Supports Blinn-Phong shading, reflection, refraction, occlusion, naive anti-aliasing. *C, OpenGL Shading Language (GLSL)* 

**3D Paint Brush** Oct '15 - Jan '16

Stylus enabling painting in 3D space by transmitting accelerometer output to app. Final project for Computer Systems course, selected as innovative standout. *C, Processing, Socket.IO* 

Community

Contributed Android prototypes for heavily requested core React Native features.