**EDUCATION**

University of Illinois at Chicago – Chicago, IL *Expected May 2018*

Bachelor of Computer Science (*Software Engineering Concentration*) *–* GPA: 3.5 / 4.0

**SKILLS**

Programming Languages: C (4 years),C++ (2 years), C# (2 years),Java (5 years), JavaScript (1 year) HTTP + CSS (1 year)

Computer repair (~8 years experience)

**COURSES**

* Video game design, Visualization and Visual Analytics, Virtual and Augmented Reality, Object Oriented Languages and Environments, Software Design, Computer Design, Software engineering(I and II).

**WORK EXPERIENCE**

*Game Design Internship December 2017 – Present*

MassVR - Schiller Park, IL

* Thoroughly tested the company’s main game by documenting bugs via Jira with regard to sprint tasks/goals.
* Using Unreal engine, with source control via perforce, implemented and tested a portion of the nearby player warning system, which signaled players about the location of other players in the physical world.

*Undergraduate Research Assistant at the Electronic Visualization Laboratory (EVL)* *May 2017 – Present*

University of Illinois at Chicago (Chicago, IL)

* Worked on a team with a fellow undergraduate research assistant on VAST Mini Challenge 3 for IEEE VIS 2017. Created a web-based image analysis tool (using JavaScript/D3) that allowed users to compare satellite images of varying bands to distinguish plant health/weather conditions and other phenomena to identify trends of the forest preserve. Submission has been published, and received an honorary mention at the IEEE VIS 2017 conference
* Working on the multi-university project (project SENSEI), under Professor Dan Sandin, to produce a 360 3D camera with minimal stitching artifacts.
  + Using Unity/Blender/Unreal Engine to create multiple virtual camera designs, which were used to capture the scenes with animations to test panoramic stitching algorithms and test the most optimal camera rig design.
  + Creating depth files (ply format) to check the correctness and accuracy of the camera’s assumed depth.
  + Creating C#,C++,and python scripts for taking images / image processing and process streamlining.
  + Creating a unity application to playback 3d 360 videos inside the CAVE2 and HTC vive to better see any errors.

*Professor’s Undergraduate Assistant (Introduction to Computing and Programming) January 2017 – May 2017*

University of Illinois at Chicago (Chicago, IL)

* Answered questions regarding computer languages, such as memory management, syntax, algorithms etc.
* Co-led a lab section with 21 students, by clarifying topics learned in class with clear, concise explanations, and provide assistance while students worked on their weekly programming lab assignment.

*Computer Science Tutor (Intermediate level courses) August 2016–December 2016*

University of Illinois at Chicago (Chicago, IL)

* Helped students with programming related tasks, including assistance with code debugging/design decisions/language syntax, and answering a variety questions about C or Java.
* Refined students’ understandings on data structures ranging from hash tables, graphs, BSTs, syntax, including low level topics including memory management and assembly (X86/Y86).

**PROJECTS** *(visit* [bkupie.github.io/projects](http://bkupie.github.io/projects) *for demos and other projects)*

* (Personal project) Smart clock using Arduino UNO (with ESP8266 for internet connection) with a 4x20 screen to display information, a buzzer to play a tune for the alarm, a remote to be used as input, RTC module to keep time even if system loses power, and a dht22 sensor for temp/humidity (compared with temp from RTC for accuracy).
* (Personal website) Created a website using github pages, to feature both personal and school projects over the years. Website has been maintained and updated overtime.

**CERTIFICATIONS/LICENSES**

A+ Certified (Computer repair) by CompTIA

**AWARDS**

IEEE Visual Analytics Science and Technology (VAST) Challenge Honorable Mention (Mini-Challenge 3), 2017

**PUBLICATIONS**

V. Mahida, B. Kupiec, A. Burks, T. Luciani, G.E. Marai, "MC3 - A Web-Based Interactive Image Explorer for Temporal Analysis of Satellite Images", IEEE Visual Analytics Science and Technology (VAST) Challenge 2017 Proceedings, pp. 1-2, 2017.