Bartosz Kupiec

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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 *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.