# **SONGQIAO SUN**

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### **PROFILE OF SKILLS**

- Robust computer project design ability with sufficient knowledge in design patterns and using developing frameworks
- Self-motivated skill learner, constantly pursuing new goals and gaining new skills inside the IT community as a self interest
- Capable of working independently with minimum supervision and enthusiastic about working in a team
- Proficient experience in web, software, game and digital art designs from personal and schooling works
- Demonstrate effective problem solving skills by utilizing various software and programming languages

### TECHNICAL SKILLS

- Programming Languages: C# (ASP.NET, MVC, Entity Framework), Python, Java, C++
- Web Client-side Languages: Javascript, HTML, CSS
- Database Management Software: MySQL, SQL sever
- Microsoft Office: Word, PowerPoint, Excel
- Version Control Experience: Github
- Design Software Experience: Autodesk Maya, Unity5, Adobe products (Photoshop, Premier)
- Operating System Experience: Windows, MacOS

# **EDUCATION**

# **University of Windsor**

Windsor, ON

- M.Sc in Computer Science, June 2018
- Thesis publication: Agent-based Crowd Simulation Model in a Gaming Environment

# **Beijing University of Technology**

Beijing, China

B.SE in Digital Media and Design, June 2015

### MASTER THESIS & PROJECT

Agent-based Crowd Simulation Model in a Gaming Environment

May - Oct 2017

- Thesis and project is based on the idea of using 3D engine to create a group of people with individual differentiations on both appearances and behaviours (especially on stampede simulation) to study the agent-based crowd simulation
- Created a novel method for auto-generating 3D agents with differentiation on appearance (DAGM), finished all 3D-models in Autodesk Maya and behaviour control system was created in C# with minimized system usage
- Designed a collision system that can dynamically calculate surrounding information for each agent
- Applied an obstacle system that can be interacted by walking agents

- The project is able to render over 1000 customized agents, at realtime, with path-finding ability and can actively analyze and avoid buildings as well other agents
- Paper according to this project was published on IEEE conference ICMCS'18 (Paper ID: 64)

### PROFESSIONAL EXPERIENCE

### Graduate Assistant

# $\ \, University \ of \ Windsor, \ Windsor \ | \ ON$

Sept 2016 – Dec 2016

### Intro to Multimedia Systems(60-350)

- Conducted 90 minutes of weekly laboratory experiments
- Guided 20 students working in Photoshop to create 2D designs
- Supervised and assisted students with finishing course exercises in the lab to avoid any misunderstanding
- Opportunely marked students assignments
- Customize feedback to each student to improve their learning quality

### Graduate Assistant

# University of Windsor | Windsor, ON

Jan 2017 - Apr 2017

# Computer Architecture II: Micro. Program(60-266)

- Led laboratory experiments two times per week for one semester
- Assisted 40 students to set up coding environment in visual studio with every student finished their setup in the first lab
- Guided all student finished every coding tasks on assembly language
- Answered to students who have more problems and an individual assistant was provided when it is needed

### VOLUNTEER EXPERIENCE

### Tech Wizard

### Educational Developers' Caucus Annual Conference | Windsor, ON Feb 2016

- Agilely deployed devices (computers, projectors, remote controllers, lighting systems) in more than six conference rooms within one hour, before the commencement of the event to ensure a successful start for the presentations
- Stayed alert at all times during the conference proceeding and quickly presented troubleshooting on an out-of-order projector to ensure meeting efficiency

### **References Available Upon Request**