Da Peng

1B Computer Science

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SKILLS SUMMARY

- Languages: Java, C, Python, JavaScript, HTML/CSS, Racket (Scheme)
- Strong collaboration and communication skills gained by team projects and experience as a tutor

EDUCATION

University of Waterloo

Sept 2017 - Present Waterloo, ON

Candidate for Honours Computer Science

- 4.0 GPA 92% Average
- Faculty of Mathematics Entrance Scholarship (\$8000)

PROJECTS

TankFighter (Lead Programmer) | Java, Graphics2D

May - June 2017

A top-down shooter game

- Worked in a team of three; used a Gantt Chart to allot time and assign tasks to different members
- Implemented game physics, collision detection (AABB and circle collision), and the BFS algorithm to allow enemies to travel towards the player while avoiding bullets
- Used OOP for the player, enemies, walls and bullets to avoid repetitive code
- Wrote code to parse text from an external file into levels to allow for easy level editing
- Followed the software development life cycle (SDLC) to ensure early detection of problems

Derivative Grapher | Java, Graphics2D

June 2017

Graphs a function and its derivative

- Researched and implemented code to parse a string given by a user into a mathematical function
- Simplified derivative calculations by using limits rather than derivative rules

Fall Down | JavaScript, HTML, CSS

Jan - Mar 2016

A 2D infinite scrolling game

- Created 2D graphics in JavaScript using an HTML Canvas
- Implemented gravity, friction and random platform and upgrade generation

WORK EXPERIENCE

Extreme PC Internship

June - July 2016

Computer Assistant

Guelph, ON

- Researched product specifications from their manufacturers' websites
- Created and polished ~2000 product descriptions on the Extreme PC website using HTML
- Assembled custom gaming computers through collaboration with 2 other co-op students

Private Math Tutor June - Aug 2017

- Taught high school level math to 5 students ranging from Grade 9 to Grade 12
- Effectively communicated with students and their parents to arrange sessions and help them understand the high school math curriculum