Karan Huynh

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TECHNICAL SKILLS SUMMARY

- Preferred Languages: **C#, C, Python**
- Familiar Languages: **HTML/CSS, SQL, PHP, JavaScript, jQuery, Visual Basic, Ruby**
- Googling fast
- Experience with Adobe Photoshop, Illustrator, Flash, Dreamweaver
- Worked with Visual Studio 2013, pgAdmin, FileZilla, ArcGIS, WaveMetrics, PuTTY

WORK EXPERIENCE

Scientific Computer Programmer; *Environment Canada, Toronto, Ontario*; May - August 2014

- Created Python scripts to automate layer image creation with ArcGIS mapping software and SQL queries
- Optimized application load time across a research department of 60 individuals by 50%
- Learned Domain Specific Language (Igor) rapidly to manipulate 1Tb experimental data and output statistics
- Developed internal tools to optimize Excel database file updating processes implemented with Visual Basic
- Graphically modeled scientific data for scientists' journal publications using WaveMetrics and GnuPlotter

DESIGN PROJECTS

Fix-it-Felix Jr. - *C# OOP Game simulation*

- Worked on the Level Editor, Villain, and Obstacles classes to variably adjust difficulty for the user
- Responsible for designing all graphical components using Adobe Photoshop and Illustrator
- Led a team of 5 highly motivated individuals to complete tasks and consistently meet deadlines

Miniature Sim City - *C# OOP Game Simulation*

- Created a 2D grid array to construct a small scale city that models the real world
- Integrated graphic user interface components with self-designed visuals using Adobe Photoshop
- Formulated and implemented functions to asses population, economy, and overall score
- Designed Unified Modeling Language diagrams to plan and organize all software components

Gene Sorting Simulator - *C# Command Line Bioinformatics Application*

- Designed search and sorting algorithms to manipulate a gene sequence given an input DNA file
- Optimized information output gathering processes to output statistics
- Performed data analysis to extrapolate conclusions based off of statistical results

KenKen Solver - *Scheme Logic Puzzle*

- Implemented recursive algorithms to derive a solution using functional programming paradigms

AWARDS AND RECOGINITION

- University of Waterloo Merit Scholarship
- Ontario Scholar Award - Awarded to students with top academic achievement
- Computer Science Award - Awarded for highest academic achievement
- Communications Technology Award - Awarded for highest academic achievement
- Core French Program Award with Distinction

EDUCATION

Candidate for Bachelor of Computer Science; *University of Waterloo*; September 2013 - Present

- Honours Bioinformatics Option, Co-operative Program
- Executive planning team Webmaster (2013) and VP Finance (2014) of the CS Bioinformatics Club

ACTIVITIES AND INTERESTS

- Makeup, Charity Work, Biking, Long Distance Running, Action Movies, Face-to-Face Conversations