Eric Keefe

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EDUCATION

Willamette University (WU) Salem, Oregon
Mathematics and Computer Science (3.93 /4.0) August 2015-present

- Awarded highest academic scholarship
- Awarded Kenneth Batchelder Memorial Computer Science Scholarship
- Relevant coursework: Intro to Programming, Intro to Functional Programming, Data Structures, Computational Science, Architecture and Compilers, Analysis of Algorithms, Computer Graphics, Junior Seminar
- **Athletics:** Varsity Men's Soccer team: started 17/25 games since sophomore season
- **Music:** Percussion Ensemble (Spring Semester 2016)

Victoria University of Wellington Wellington, New Zealand
(4.08/4.0) March 2015-July 2015

- Awarded Vice Chancellor's Scholarship
- Relevant Coursework: Accelerated Java Programming (4.0/4.0)
- Also completed Mathematics Acceleration and Extension at the University of Auckland (4.3/4.0)

WORK EXPERIENCE

Software Security REU at Boise State University Boise, Idaho

- Created a framework for parallel data flow analysis by extending soot's ForwardBranchedFlowAnalysis abstract class June 2017-July 2017
- Implemented this framework with a reaching definitions analysis, and compared runtimes when using our parallel framework, another parallel framework, and a nonparallel framework
- Presented my work at the Idaho Conference on Undergraduate Research and at WU's computer science tea

Adobe Dreamweaver Instructor Salem, Oregon

- Designed and taught a week-long course in Adobe Dreamweaver July 2016
- Students built a simple website using bootstrap components but also worked with HTML and CSS code

CodeHS Tutor Salem, Oregon

- Graded high school student's assignments March 2016-September 2017
- Worked through content in order to be able to grade more advanced assignments

GROUP PROJECTS

Dungeon Map Generator (fall semester sophomore year)

- Uses MATLAB to pseudo-randomly generate dungeon maps, each of which contain an entrance, an exit, a key, and a locked door
- Presented at Student Scholarship Recognition Day

A Star Search Algorithm (spring semester sophomore year)

- Uses Java to implement and visualize the A star algorithm
- Allows the user to construct walls, then finds the shortest path between two points

Music Visualization (fall semester junior year)

- Currently uses JavaScript and HTML to visualize music in a basic manner
- Our goal is to load any song, extract the melody, and generate a game based off this melody

Programming Languages: Java, JavaScript, Matlab, HTML, Latex, Haskell, Processing, Corona, R, Maple, Ubuntu/Linux, CSS, Git

High School Awards: Cambridge Math (1st 2013, 1st 2011, 3rd 2010), English (1st 2013), Barnicoat Prize for Senior English Literature (2013), Australian Math Competition (Distinction 2013, High Distinction 2011); ICAS Science Assessment (High Distinction 2011); Eton Press Casio Senior Mathematics Competition (Top 100 in 2012), Victoria University Mathematics Competition (1st place team 2014), Mathswell (Wellington Region Mathematics Competition)(2nd place team 2010, 2011, 2012)