

Jake Scott Pitkin
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Work Experience:

University of Utah

School of Computing

Head Teaching Assistant

January 2016 to Present

CS 2420 - Introduction to Algorithms & Data Structures

Teaching first-year computer science undergraduates about the basics of algorithms and data structures using Java. I run weekly labs, have weekly office hours where students can get help and proctor exams. Additionally, I coordinate the other teaching assistants by making grading assignments and rubrics.

University of Utah

School of Computing

Head Teaching Assistant

August 2015 to December 2015

CS 1410 - Object-Oriented Programming

Helped teach first-year computer science undergraduates using C++ and Arduino kits. I guided students through labs where we build simple projects with the Arduino kits. Additionally, I designed grading tests and rubrics to evaluate their work and coordinate the other teaching assistants.

University of Utah

School of Computing

Teaching Assistant

January 2015 to April 2015

CS 3500 - Software Practice I

Ran lab sessions teaching students about proper software practices using C# and Visual Studio. Helped students build a desktop spreadsheet program and an online multiplayer Boggle clone using a RESTful API. Designed grading rubrics and organized the grading of student's code and exams.

Skills:

Languages:	C/C++, Java, C#, JavaScript, PHP
Operating Systems:	OS X, Linux, Windows
Applications:	Microsoft Word, Excel, PowerPoint, Visual Studio, Eclipse
Markup:	LaTeX, HTML, XML
Other:	Unix Shell, Git

Relevant Projects:

Asynchronous Socket - A non-blocking socket object that encapsulates connecting to a server. Written in C++ with Boost libraries. Built to help abstract away the details of connecting to a server. Built for Dr. Peter Jensen during Spring 2015 to assist in his grading of the final projects for Software Practice II.

Multicircle - A browser-based game where two players compete to control all the circles on the map. Built in a team of three using JavaScript and Node.js. Allows players to join a game with a random player or to make a game lobby their friend can join.

TA Application - A web-based application where users can apply to be a teaching assistant or manage applications if they are an admin. Developed with HTML, CSS, JavaScript and PHP. Built to practice web scraping, input validation, password hashing, Ajax, responsive UI's and other web techniques.

Boggle Clone – Created a client GUI and server that allows two players to play “Boggle” over a network using sockets. The results of finished games are stored to a MySQL database and then presented on a website hosted on the server.

Spreadsheet - A desktop spreadsheet program written in C#. Included a formula parser, a cell dependency graph and a UI. In a team of four, a server was implemented so multiple users, from different machines, could edit spreadsheets over a network. The spreadsheets were saved in a MySQL database.

Education:

The University of Utah - Salt Lake City, Utah
Computer Science BS

August 2013 - May 2017
GPA: 3.844/4.0

Dean's List: Fall 2013, Spring 2014, Fall 2014, Spring 2015, Fall 2015