# Kyle C. Vedder

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## Education \_\_

## **University of Massachusetts Amherst**

B.S. IN COMPUTER SCIENCE 2015 - 2019

• GPA: 3.89

## Skills\_

- Proficient in Java (Eclipse/Netbeans) and C/C++ (Visual Studio/Emacs)
- Experience with git, Spring Boot/Web/MVC, FlumeJava, Scala, Python, SQL, HTML, CSS, Bash, FORTH, LTFX, Dart
- Develop on Windows and Debian Linux
- Web Service development, Robotic systems programming and development, Microcontroller programming, Socket programming, some Real Time system development

## **Industry Experience** \_

#### **Google Inc**

SOFTWARE ENGINEERING INTERN

Summer 2016

• Worked with AdWords Overview team to deliver to users useful, statistics driven insights about their ad campaigns. Wrote FlumeJava data pipeline to do offline statistical analysis on massive customer datasets as well as developed UI components using Dart and AngularDart to display the data.

## **Unidesk Corporation**

C++ Developer Summer 2015

• Worked with a team of engineers to successfully design and implement a framework to test proprietary offline Windows registry hive manipulation APIs. Wrote C++ framework to call Win32 APIs to provide setup and validation of registry hives manipulated by Unidesk's registry hive editor.

## **Unidesk Corporation**

ROBOTICS INTERN Summer 2014

• Worked with the CTO and CMO to successfully implement an articulated robot arm for a trade show to be manipulated by attendees through an iPad. Wrote Java backend to implement a JSON based web service to accept highlevel user input, translating the commands into lowerlevel FORTH commands to choreograph robot movements while avoiding collisions.

# **Academic Experience**

## **CS 220 Programming Methodologies**

TEACHING ASSISTANT 2016 - PRESENT

Working with six other TAs to lead discussion sections, hold office hours, and answer questions on Q&A forum. Worked
with instructor to improve projects as well as design and enact structural changes to the discussion sessions to better
suit students needs.

#### **AMRL Robotics Lab**

RESEARCH ASSISTANT 2016 - PRESENT

• Working with PhD student to implement PRM\*, a real-time motion control algorithm for use as a baseline for research comparison. Implementing a benchmarking framework to compare motion control algorithms for research comparison.

#### **FIRST Robotics - FRC Team 467**

LEAD PROGRAMMER & STEERING COMMITTEE MEMBER

2012 - 2015

- Led a team of several students to program a robot to meet each year's challenge within a six week development period. Coordinated architecture and design with the Electrical Team to wire the robot and define robot sensors.
- Worked with a team of five students to run twice-weekly Steering Committee meetings, oversee sub-team coordination, and manage build schedule.

## **Honors & Awards**

#### **Course Citation**

CS 187 DATA STRUCTURES AND ALGORITHMS

2016

• Received course citation for outstanding performance and ranked in the top three students.

#### **Dean's List**

REGISTRAR'S OFFICE 2015 – PRESENT

• Made Dean's List every semester for achieving above a 3.50 semester GPA.

### **Entrepreneurial Spirit Award**

GRINSPOON ENTREPRENEURSHIP INITIATIVE

2016

• Received award for demonstrable entrepreneurial spirit in the development of Marvin Gardens.

### 1st Place AWS, 1st Place Groupon, 2nd Place Overall

HACKHOLYOKE HACKATHON

2016

• Developed a working application in twentyfour hours that can provide UMass and Holyoke students personalized daily email digests of allergysafe foods to eat at each campus dining hall. Implemented the RESTful API, Email Generation Logic, Database I/O, and Web Scrapers.

## **Most Technically Challenging Project Award**

BLUEPRINT HACKMIT HACKATHON

2016

• Developed a working application in eight hours with a team of three other high school students that provides free internet access via SMS text messages. Implemented an HTTP service backend in Java.