## **KEVIN YAN**

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**Education** The University of Texas at Austin

**B.S. Computer Science** 

December 2019

**GPA: 3.63** 

Relevant Coursework:

· CS 314: Data Structures

· CS 429H: Computer Organization and Architecture: Honors

· CS 439H: Principles of Computer Systems: Honors

· CS 345H: Honors Programming Languages

· CS 331: Algorithms and Complexity

· CS 378H: Intro to Data Mining: Honors

## **Experience** Software Engineering Intern

**National Instruments** 

Austin, TX

Summer 2018

 Refactored a database API to eliminate unnecessary code duplication and cache coherency issues

Worked with C++, LabVIEW

## Computer Architecture Research

**University of Texas at Austin** 

Austin, TX

Summer 2017

- Improved instruction cache hit rate by testing replacement policies on large mobile and server programs under Dr. Calvin Lin
- Analyzed 200+ mobile and server traces
- · Created cache simulation for various cache replacement policies, including Hawkeve
- · Tuned certain replacements policies to increase hit rate Worked with C++, Bash, Java, Condor

## **Projects**

**Hack Rice Project - Tweet My Life Chrome Extension**: Utilized Twitter API to Tweet every time a new window was opened along with a screenshot of that window.

**FUN to Assembly Compiler and Interpreter**: Created a compiler to compile a simple language into assembly, as well as an interpreter for the same language. Includes functions, if/else statements, switch statements, for loops, basic arithmetic, and comparison operators.

**Instruction Pipeline**: Created a pipelined processor to handle a basic instruction set with branch prediction. Accounted for various data and control hazards.

**Virtual Memory Implementation**: Converted physical memory to virtual memory by creating and organizing page tables. Implemented a page fault system that handled invalid memory requests.

Skills Experienced with Java · C · C++

Familiar with Python · git · Bash · Unix

**Extracurriculars** ICPC Competitive Programming Club Member

UT Smash Bros Officer

2017 - Present 2017 - present