# **JAKE HARRIS**

Motivated, curious, and self-starting individual recently graduated with honors in Computer Science. Eager to translate academic background and internship/project experience to develop high quality code that leverages appropriate data structures and algorithm design. Strengths lie in time-management, creative problem solving, and ability to work independently.

#### **EDUCATION**

### UNIVERSITY OF NOTRE DAME, B.S. in Computer Science, cum laude

2017-2021

Concentration in Media Computing | Overall GPA: 3.79 / Major GPA: 3.90

**Relevant Coursework:** Compilers and Language Design, Analysis of Algorithms, Programming Paradigms, Operating Systems, Data Structures, Systems Programming, Computer Architecture **Honors:** Dean's List (College of Engineering) Fall 2018, Spring 2020, Fall 2020, Spring 2021

#### **EXPERIENCE**

## Teaching Assistant | NOTRE DAME, South Bend, IN

Computer Architecture

Aug. 2020 - May 2021

Digital Logic Design

Aug. 2019 - Dec. 2019

- Concepts related to the Arm ISA, caching, pipelining, machine learning, virtual memory, and logical circuit design.
- Cultivated student understanding of course content through in-person and virtual office hours.
- Created testbenches to assist other teaching assistants in the grading of weekly Verilog modules.
- Facilitated the redesign of course structure in accordance with University mandated COVID-19 guidelines.

#### Software Engineering Intern | BRICLEIR, Palo Alto, CA Jan. 2020 – May 2020

- Assisted in the development and maintenance of company platform using Ruby and JavaScript.
- Restructured landing page to promote customer engagement in platform features and resources.
- Created an application to make requests to Instagram's API and properly format returned data.

#### **PROJECTS**

#### City Generation Tool, Senior Independent Research

**Spring 2021** 

- Designed a tool in Python for generating city blocks in Maya.
- Built features to allow users to import custom building components and easily align adjacent city blocks.

#### **Compiler**, Compilers and Language Design

Fall 2020

- Constructed a working compiler that transforms a C-like language into working assembly code.
- Verified the correct handling of language edge cases through script executable test programs.

#### Web Server, Systems Programming

**Spring 2019** 

- Created a server in C which utilized low level system calls related to sockets and networking.
- Designed the server to support parallel processing of directory listings, static files, and CGI scripts.
- Developed a second program in C to make simultaneous requests to the server to test error handling.

#### TECHNICAL SKILLS

Languages: Python, C, C++, JavaScript, MEL, HTML, CSS, SQL, Verilog

**Software:** Maya, Mudbox, Photoshop **Tools:** Git, WebGL, Three.js, React.js