# KATHRYN BUNNER

kbunner@stanford.edu | (402) 253-6174 | linkedin.com/in/kathryn-bunner

#### **EDUCATION**

#### **Stanford University**

Graduating Spring 2019

B.S., Computer Science | Minor, Native American Studies

Programming Languages: Python, Java, JavaScript, HTML, C++, SQL, Google Apps Script

**Relevant Coursework:** Computer and Network Security | Object-Oriented Systems Design | Introduction to Databases | From Languages to Information (NLP) | Cybersecurity: A Legal and Technical Perspective | Decision Making Under Uncertainty | Computers, Ethics, and Public Policy | Breaking Codes, Finding Patterns

#### **INDUSTRY EXPERIENCES**

## PwC, San Francisco | Cybersecurity and Software Engineering Intern

Summer 2018

- + Worked on client Bug Bounty program to verify and triage reported vulnerabilities, created fixes for issues such as XSS and subdomain takeovers, validated the successful fix of dozens of bugs, and updated researchers on the status of bounties
- + Built a dynamic web tool using Google Apps Script and Python to automate the ticketing process of Bug Bounty utilizing API calls, parsing, and mapping to locate the owner of domains and more efficiently assign Jira tickets

## Raytheon, El Segundo | Software Engineering Intern

*Summer 2017* 

- + Extended Coverity Software coverage through the development of a series of static analysis checkers in C++, which detect security vulnerabilities in internal code bases written in C
- + Produced a database of next-generation best practice guidelines for hardware components based on recent publications on cyber countermeasures in control-flow integrity and hardware debugging

### CISAC, Stanford University | Cyber Research Intern

Summer 2016

- + Worked under the instruction of Dr. Herb Lin, Senior Researcher in Cyber Policy and Security
- + Constructed cybersecurity related data such as policy briefings and educational papers on topics like attribution and health

#### SOFTWARE PROJECTS

#### Yup'ik/English Language Translation Tool (Python)

- + Created a Python script to parse a PDF and construct the backend data structure of a more accessible and comprehensive translation tool to help preserve the indigenous Yup'ik language
- + Project won first place at the 2017 AISES National Conference miniHackathon

#### Chatbot (Python, Unix)

+ Implemented a interactive Chatbot that recommended movies based on user's preferences and sentiment; incorporated stemming, regular expressions, and logarithmic based recommendations

## MapReduce (C++, Unix)

+ Built a fully operational MapReduce Framework utilizing multiprocessing, networking, threading, and distributed computing techniques

#### LEADERSHIP AND AWARDS

**Stanford American Indian Science and Engineering Society** | President 2017-2018, Engineering Diversity Liaison 2016-2017, Development Chair 2015-2016, Frosh Intern 2014-2015

**Stanford Powwow** | Financial Officer 2016-2017

Stanford Delta Delta Delta | Academic Chair 2016-2017, Reference Chair 2015-2016

**School of Engineering Awards** | 2017 Rising Leader of the Year, 2016 Exceptional Commitment for Engineering Diversity Programs