# Kaden M. Kilburg

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#### **EDUCATION**

Iowa State University, Bachelor of Science, Software Engineering

May 2022

- Ames, IA
  - Psychology Minor
  - GPA: 3.99
  - 9 credits from graduate-level COM S courses

#### SKILLS & HONORS

- Computer Skills:
  - o Languages: Python, C, C++, C#, Java, MATLAB, MIPS Assembly
  - o Web Development: JavaScript, PHP, HTML, and CSS; React, Angular, and ZF2
  - o Tools: TF Keras, OpenCV, MySQL, WebGL, Unity
- Honors: Eagle Scout, VRAC Design Challenge Winner, Intramural Wrestling Champion

### **EXPERIENCE**

# Samsung Semiconductors, GNSS Platform Software Engineer Intern

May 2021-Aug. 2021

Cedar Rapids, IA

- Integrated Android memory testing tools with Samsung's GNSS testing framework
- Resolved GNSS memory leaks and faults identified by said memory tools
- Submitted thorough documentation on memory tool benefits, usage, and upkeep

## Collins Aerospace, Software Engineering Intern

June 2020-Aug. 2020

Cedar Rapids, IA

- Migrated build system for Software Defined Radios to speed compile times
- Built performance analytics webpages to better identify bugs and monitor execution time
- Practiced within an Agile work environment

## Iowa State ITS WebDev, Full Stack Web Developer

April 2019-May 2020

Ames, IA

- Created, maintained, and debugged webpages for Iowa State University
- Assisted teammates in problem-solving and decision-related challenges
- Made use of time between projects performing code reviews and improving web programming knowledge

## **PROJECTS**

- AI for a Multiagent Survival Game
  - Designed a tiled-based game for multiagent interactions similar to OpenAI's NeuralMMO
  - o Interfaced with Ray RLlib using the PettingZoo API
  - o Tested several algorithms from RLlib where Proximal Policy Optimization performed the best
- NBA Predictions AI
  - o Scraped and trained on NBA statistical data from 2000 to 2021
  - Tested linear ML and deep learning models for predicting winning NBA teams
  - The best model achieved a 68% F1 score and featured an individual player statistic fed RNN
- Other:
  - o Student Major Predictor
  - o Simple Keras Clone
  - o Rhythm Game Android App

- o Intonation Training Application
- o 4 Minor Unity Video Games
- Electrodermal Activity Research

## **ACTIVITIES**

### **Iowa State University**

- Game Development Club
- Statesmen Choir

- Fencing Club
- Intramural Wrestling