

# Kaden M. Kilburg

kmkilburg28@gmail.com • (319)-929-5034 • 232 Meadowview Dr • Lisbon, IA 52253



## EDUCATION

**Iowa State University**, *Bachelor of Science, Software Engineering*  
Ames, IA

May 2022

- *Psychology Minor*
- GPA: 3.99
- 15 credits from graduate-level COM S courses

## SKILLS & HONORS

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

## EXPERIENCE

**Samsung Semiconductors**, *GNSS Platform Software Engineer Intern*  
Cedar Rapids, IA

May 2021-Aug. 2021

- 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*  
Cedar Rapids, IA

June 2020-Aug. 2020

- 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*  
Ames, IA

April 2019-May 2020

- 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
  - Interfaced with Ray RLlib using the PettingZoo API
  - Tested several algorithms from RLlib where Proximal Policy Optimization performed the best
- NBA Predictions AI
  - 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:
  - Student Major Predictor
  - Simple Keras Clone
  - Rhythm Game Android App
  - Intonation Training Application
  - 4 Minor Unity Video Games
  - Electrodermal Activity Research

## ACTIVITIES

**Iowa State University**

- Game Development Club
- Statesmen Choir
- Fencing Club
- Intramural Wrestling