# **Robert Kellems**

Washington, DC
<a href="mailto:robertgkellems@gmail.com">robertgkellems@gmail.com</a> | (812) 896-5858
<a href="mailto:LinkedIn">LinkedIn</a> | Website

#### **EDUCATION**

### Indiana University, Bloomington, IN

- Bachelor of Science in Computer Science Specialization: Artificial Intelligence
- Bachelor of Science in Cognitive Science
- **Honors:** Phi Beta Kappa, Dean's List, Founders Scholar, Murray Austin Goldstone Scholarship for Undergraduate Research in Cognitive Science

### **TECHNICAL SKILLS**

Languages: Python, C/C++, Java, R, SQL, JavaScript

Platforms: Windows, Linux

AI & Data Science: TensorFlow/Keras, Scikit-learn, Pandas, Matplotlib, OpenCV

Other: Git, Jupyter, Docker, AWS

#### WORK EXPERIENCE

## VIAVI Solutions, Indianapolis, IN

June 2023 - Present

GPA: 3.975/4.000, May 2023

Software Development Engineer, September 2023 - Present

- Develop and enhance an embedded software system which facilitates the flow of broadband spectrum data between cable network equipment and a front-end web application using C++
- Engage in comprehensive testing and debugging across all software and hardware components, ensuring excellent performance for customers and hardware vendors

### AI/ML Intern, June 2023 - August 2023

- Improved upon existing algorithms for analyzing network performance data using machine learning models and digital signal processing techniques
- Conducted extensive research on models for natural language to SQL translation and developed specialized tools to evaluate their performance

# Indiana University, Bloomington, IN

**August 2022 - Present** 

Research Assistant

- Build an experimental web application which allows users to record and submit their subjective perception of various auditory phenomena by interacting with a novel interface
- Collect and interpret user data to reach conclusions on human auditory perception using R and statistical methods

### ACADEMIC PROJECTS

## AI Futures Artificial Intelligence Ground Vehicle Challenge

**Spring 2023** 

 Designed and implemented computer vision algorithms to enable autonomous movement using OpenCV, received 1st place in the undergraduate category

### JPMorgan Chase Data for Good Hackathon

Fall 2021

 Applied various data analysis techniques in order to suggest potential investments for the improvement of disadvantaged schools in New York City

# **Neural Networks for Sound Recognition**

Spring 2021

• Implemented several different deep neural network designs in order to classify environmental sound clips using Python and TensorFlow/Keras