Ethan Kellerhals



EDUCATION

University of Colorado Boulder

Boulder, CO *Aug 2018 – May 2023*

Bachelor of Arts in Computer Science

• Relevant Courses: Intro to AI, Data Structures, Algorithms, Computer Systems, Database Systems

• Honors: Dean's List 2023

TECHNICAL SKILLS

Languages: Python, C/C++, Java, HTML, CSS, Sass, JavaScript, C#, SQL, NoSQL

Frameworks: PyTorch, Bootstrap, Flask

Developer Tools: Git, Docker, Vim, Visual Studio, Android Studio, Unity, JUnit, Jira, Figma **Libraries:** OpenCV, NumPy, Pytesseract, Pandas, Matplotlib, BeautifulSoup, SQLAlchemy

PROJECTS

Concocto (Ongoing) | Python, HTML, CSS, JavaScript, Flask, BeautifulSoup, SQLAlchemy

- Created a Flask web app facilitating user discovery of drink recipes based on available ingredients at home.
- Built a web scraper using BeautifulSoup, gathering and organizing over 1,000 drink recipes.
- Designed a fast and user-accessible front-end design in Figma, ensuring cross-browser functionality.

Automated Meter Reading | *Python, PyTorch, Pytesseract, OpenCV, NumPy*

- Developed a machine learning and computer vision API to automatically detect and read energy meters in images.
- Leveraged OpenCV to preprocess an image for accurate dial detection.
- Increased dial pointer detection by 30% using NumPy's 'linspace()' function to analyze pixels along radial lines.
- Optimized Pytesseract OCR configurations to enhance digit readability and retrieve dial orientations.
- Achieved meter value accuracy rates exceeding 97% during testing and validation phases.

Yellow Submarine | *Unity, C#, Oculus Rift*

- Developed an underwater VR scavenger hunt to raise awareness and deepen knowledge of endangered fish species.
- Designed and implemented a real-time distance counter, enhancing the user experience.
- Incorporated player movement that emulates having scuba gear on, such as a buoyancy control device.
- Achieved an average rating of 4.5 out of 5 during playtesting and the live-demo.

WORK EXPERIENCE

Software Developer - AI Trainer (Contract)

Oct 2023 - Present

DataAnnotation.tech

Boulder, CO (Remote)

- Train Large Language Models (LLMs) to generate accurate code solutions in various technologies such as Python, C++, Java, JavaScript, SQL, and more.
- Evaluate correctness and efficiency of AI-generated code snippets, providing feedback and making necessary corrections to improve model performance.
- Collaborated with team members to craft over 350 diverse coding challenges and solutions for the AI chatbots.
- Tested and debugged over 900 Al-generated code snippets to ensure proper functionality in different environments.

Journey Leader

Aug 2017 - Jan 2021

Des Moines, IA; Boulder, CO

Noodles & Company

- Demonstrated leadership by mentoring and training new staff to uphold high standards.
- Achieved a 90 second reduction in customer food wait times through streamlined kitchen operations.
- Thrived in a high-pressure, fast-paced environment, consistently delivering prompt, high quality service.