# Peak Mind Peak Mind Peak Mind

## Visualizing Biometrics in VR Simulations to Reduce Workplace Stress

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## Overview:

Dr. Alicia Mckoy at Peak Mind aimed to improve the mental wellbeing of employees. Peak Mind researchers have been studying stress and stress reduction techniques. The company partnered with HP and acquired access to the HP Omnicept Headset, which is capable of collecting biometric data while users are in a simulation. Our team was tasked with using the HP Omnicept SDK (Software Development Kit) to collect data from the headset, visualize it, and store it on their web application to aid in their research.

## Tech Stack:

- React.js
- Unity (C#)
- Flask (Python)
- AWS
- HP Omnicept SDK
- Docker

## Conclusion:

Now, the software is being used on Indianapolis police officers to destress after their shifts. Peak Mind's research scientists are analyzing the data collected with our software to understand how their simulations affect users. As a team, we have learned how to develop well-tested, well-documented software that can be used by real people.

## Features:

- Display data collected with the HP Omnicept Headset in real time
- Allow for researchers to flag significant points in the simulation
- Visualize data collected from completed simulations in a web application
- Export data as raw datasets, PDFs, and MP4 Video Files

Computer Science