Head Mounted Display Integration for Orthopedic Surgery

- Surgeons require dozens of X-ray images to establish the relationship between the instruments they introduce and the complex anatomy. Augmenting the correct 2D and 3D information near or within the surgical site may support the surgeon and increase patient safety
- **What Students Will Do:**
  - In the lab: integrate the HMDs in 3D imaging platform
  - Roll-out of HMDs for surgery (2D views), and
  - Participate in CAMP CISII meetings
- **Deliverables:**
  - Project problem statement and proposal,
  - Report and Presentations
  - Attend orthopedic surgeries
  - Roll-out of HMDs to surgery
  - Evaluation of HMD for surgery
  - In lab: Integrate HMD and interventional 3D imaging
- **Size group:** 1-3 (also multiple groups of 1-3 students)
- **Skills:** programming, background in AR or CV
- **Mentors:** Bernhard Fuerst, Sing Chun Lee, Alexander Barthel, Alex Johnson, Javad Fotouhi -- camp@jhu.edu

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