Peru Dayani

perudayani@berkeley.edu | 510.710.5389

EDUCATION

U.C. BERKELEY

ELECTRICAL ENGINEERING & COMPUTER SCIENCE

Class of 2021

Github Link: **PeruDayani** LinkedIn Link: **perudayani**

SKILLS

Development:

- (++
- Java
- Python
- ROS
- JavaScript
- React
- HTMI
- CSS

Frameworks:

- Git
- Unity
- TensorFlow
- JSON API
- AWS
- Django

PERSONAL PROJECTS

- AirBand : EEG controlled Guitar Hero DevPost Link
- AR Human Emotion Tracker Github Link
- BearMaps : Mini Google Maps Github Link
- iOS Decal Apps: Github Link
- Art Work: Portfolio Link

EDUCATION WORK

• EECS16A uGSI:

Lab TA in charge of developing and teaching modules for hands-on experience to 50+ students Website Link

• MAKERFUNC VR Course Head:

Lead development and taught modules on VR to 60+ students at the MakerFunc bootcamp in Beijing, China YouTube Link

• ISAB Tech Chair:

Leading website development to help grow Berkeley's international community. Website Link

• VR Decal Course Facilitator:

Developing and teaching the VR decal to 60+ Berkeley students. Website Link

PROFESSIONAL EXPERIENCE

FOUNDER | WINAR: SPORTS STARTUP

Jan 2019 - Present | Berkeley, CA

- Founded and leading company to enhance athlete training by creating app to run perfect drills against a customized AR opponent in an injury free environment.
- Conducting market research, developing business model and managing partnership with Cal Football.
- Developed MVP using ARCore, Unity, C++ based on user testing with Cal Football.

ML RESEARCH INTERN | GERMAN AEROSPACE CENTER

June 2019 - August 2019 | Brunswick, Germany

- Developed LSTM neural nets to predict human frustration levels based on facial video, posture, heart rate and skin conductance levels.
- Studied human emotion theory to help design user study and create structured plan for future development.
- Created automated file sorting, simulation load optimization and streamlined UI systems to reduce the user study time by 1.5 hours each.

SOFTWARE ENGINEERING INTERN | SMARTVIZX

May 2018 - July 2018 | Delhi, India

- Developed system to streamline checking and addition of product models to database for manufacturers using Java, Unity and C++.
- Developed algorithms to optimize mesh creation for all models in Unity to reduce run-time lag using C.
- Learned the rigour, freedom and accountability of working in a startup.

DATA ANALYSIS INTERN | ENVIRONMENTAL DESIGN SOLUTIONS May 2017 - July 2017 | Delhi, India

then generate reports on observed trends for design team.

- Ran simulations to measure temperature values in for a building design and
- Developed analytic tool to automate the process of running simulations and finding trends using Python.

RESEARCH

HEAD RESEARCHER | UCB CENTER FOR AUGMENTED COGNITION Aug 2017 - Present | Berkeley, CA | Website link

- Leading ISAACS, a team utilizing VR/AR to define a new paradigm for humans to interact with UAV swarms and visualizing radiation and LiDAR data live-streamed from a drone in real time in the Hololens under the guidance of Prof. Allen Y. Yang, Prof. Claire Tomlin and Prof. Kai Vetter.
- Developing algorithm to 3D point cloud of LiDAR and gamma data using Google Cartographer, C and Unity.
- Developing ROS Bridge to control multiple drones and stream LiDAR, camera and GPS data in real-time using ROS, C++ and Python.

UNDERGRADUATE RESEARCHER | UCB GOPNIK LAB

Aug 2019 - Present | Berkeley, CA | Website link

 Leading development to explore learning curves for children and adults in non-intuitive environments advised by Prof. Jitendra Malik and Prof. Alison Gopnik.