Peru Dayani

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EDUCATION

U.C. BERKELEY
Electrical Engineering & Computer Science
Class of 2021
Github Link: PeruDayani
LinkedIn Link: perudayani

SKILLS

Development:

- C++
- Java
- Python
- ROS
- JavaScript
- React
- HTML
- 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 1000+ 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

WINAR: SPORTS STARTUP | Founder
Jan 2019 – Present | Berkeley, CA

- Founded and leading company to enhance athlete training by creating app to run perfect drills against a customizable 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.

GERMAN AEROSPACE CENTER | Machine Learning Researcher
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.

SMARTVIZX | Software Engineering Intern
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.

ENVIRONMENTAL DESIGN SOLUTIONS | Data Analysis Intern
May 2017 – July 2017 | Delhi, India

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

RESEARCH

UCB CENTER FOR AUGMENTED COGNITION | Head Researcher
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.

UCB GOPNIK LAB | Undergraduate Researcher
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.