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## **Bikram Pandit**

## **Graduate Student at Oregon State University**

# Former software engineer

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## Skills

## **Software Engineering**

Programming languages
 Java, Kotlin, Dart, Python, Javascript, C, C++, Swift

## • Stack and framework

Mobile app development (Native and Flutter), Frontend development (React), Backend development (Django), Automation and web scrapping (Python), AWS, GCP, Firebase, Git

## **Artificial Intelligence and Robotics**

Machine learning, Reinforcement learning, Tensorflow, Pytorch, Mujoco, 3D modeling

## Education

## **Oregon State University**

SEPT 2021 - CURRENT, USA

ANTICIPATED GRADUATION DATE: 09/2023

- Studying master's in Computer Science
  - Primary areas: Artificial Intelligence and Robotics

## Rungta College of Engineering and Technology

JUN 2013 - APR 2017, INDIA

- Studied Computer Science and Engineering.
- Acquired **85%** grade,
- Topper.
- Titled Mr. Academician
- Titled Best Outgoing International student

## **Orchid Public Higher Secondary School**

1999 - 2013, NEPAL

- Schooling for 12 years.
- Studied Computer Science
- Awarded for science project "Excavator". The first one in this video: https://www.youtube.com/watch?v=YPSukcyHOpU

# **Most recent project**

## Self-balancing Platform using Reinforcement learning (Proximal Policy Algorithm)

I have built a self-balancing platform that progressively learns to balance a platform in a simulator and then deployed it to the hardware. Two main goals are to replicate how human learns to balance (eg. stick in a finger) without explicit instruction and then make sim-to-real work.

- Project link: <a href="https://github.com/bikcrum/self-balancing-platform">https://github.com/bikcrum/self-balancing-platform</a>
- Demo: <a href="https://youtu.be/7F6NIbRNCeE">https://youtu.be/7F6NIbRNCeE</a>

# **Experience**

## **Oregon State University**

SEPT 2021 - PRESENT

Teaching Assistantship

## Digital Product Labs Nepal Pvt. Ltd

DEC 2017 - JUN 2021 (3.5 YEARS)

### LoveLock - Android and iOS

It is a Tinder-clone android application where I was responsible for developing an android application from scratch and working on an iOS app as well.

### Mycols - Android app

Mycols can provide you with all the information you desire about these climbs, with perfect graphics, and navigate your way to these magnificent climbs. I started developing this app from scratch. I also developed an "Elevation View" library for this project which is in the library section.

Link: <a href="https://play.google.com/store/apps/details?id=app.mycols">https://play.google.com/store/apps/details?id=app.mycols</a>

### Ekoplaza - Android and iOS

Ekoplaza is a Dutch chain of organic food supermarkets. (Wikipedia: <a href="https://en.wikipedia.org/wiki/EkoPlaza">https://en.wikipedia.org/wiki/EkoPlaza</a>). I was responsible to add features, debug, and frequently supporting mobile apps (Android and iOS).

Link: <a href="https://www.ekoplaza.nl">https://www.ekoplaza.nl</a>

### • ChainCargo - Flutter

ChainCargo is a tracking-based courier service in Eindhoven, Netherlands. I am responsible for developing mobile apps for courier services.

Link:

https://play.google.com/store/apps/details?id=eu.chaincode.chaincargodriver

## • ExportFeed - Python

ExportFeed is the plugin that creates your product data feed which contains information of your products in regards to your size, color, quantity, image, and custom attributes and syncs them to the desired and appropriate merchants. I am responsible to parse data provided by amazon to make it compatible with our system.

Link: <a href="https://www.exportfeed.com/">https://www.exportfeed.com/</a>

#### LoveMatch - React

Lovematch is a progressive web app, a dating app made in ReactJS. I am responsible for writing all front-end business logic in the app.

Link: https://app.wpdating.com/ (Demo Login: Userdemo, Password: password)

# **Open source contribution**

### Flutter

- I have contributed a major feature in the Flutter released in version 2.0.
- Pull request: <a href="https://github.com/flutter/flutter/pull/67249">https://github.com/flutter/flutter/pull/67249</a>

## Mock API server

- I built this library to help out with creating a Mock API server.
- This serves all API endpoints specified in Swagger.
- Project link: https://github.com/bikcrum/Mock-API-server

#### BaseNet

- <u>BaseNet</u> is known as Boundary-Aware Salient Object Detection
- My contribution is a small fix and able to run a project in a system
- Pull request: <a href="https://github.com/xuebinqin/BASNet/pull/50">https://github.com/xuebinqin/BASNet/pull/50</a>

## **HyperTrack**

- HyperTrack is a company in California that offers a location tracking platform in the cloud for mobile application developers.
- I found a major bug in the SDK and helped to solve it
- Discussion forum and proposed solution:
  - o <a href="https://github.com/hypertrack/quickstart-flutter/issues/8">https://github.com/hypertrack/quickstart-flutter/issues/8</a>
  - https://github.com/hypertrack/sdk-flutter/pull/3
  - https://stackoverflow.com/a/64804557/6117565

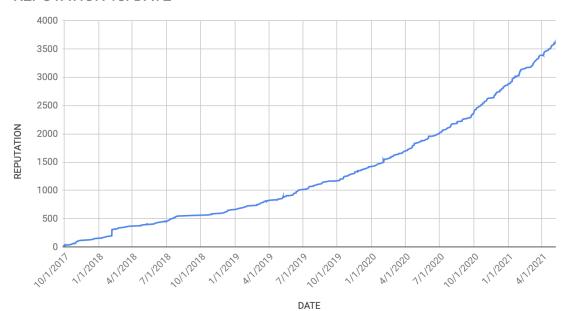
# **Community**

### Stackoverflow

https://stackoverflow.com/users/6117565/bikram

- **5,471** Reputation
- 83 answers
- ~2.4m people reach
- Top 3% in Q1/2022
- Graph representing StackOverflow reputation over time

REPUTATION vs. DATE



## **Highlighted projects**

### Universal Translator - Django & ReactJS

A translator for various applications on multiple platforms.

• Project Link: <a href="https://translator.bikcrum.com">https://translator.bikcrum.com</a>

• Demo: <a href="https://www.youtube.com/watch?v=wMyoeoo-emE">https://www.youtube.com/watch?v=wMyoeoo-emE</a>

## **Background Recorder - Android**

A creative android app that is used to record video, take pictures and record audio when the screen is off or at any state.

- 100,000+ downloads in the Play store., 4+ ratings, revenue USD 2200+
- App Link: <a href="https://play.google.com/store/apps/details?id=com.nepdeveloper.backgroundcam">https://play.google.com/store/apps/details?id=com.nepdeveloper.backgroundcam</a>
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   <a href="https://protocom/store

### COVID-19 Tracker - Android, Google Cloud

An android application for better statistics of pandemic disease.

- A comprehensive tool to visualize live COVID cases every day
- App Link: <a href="https://drive.google.com/open?id=190g6oy1AQC72nnkSMMY79ik33HfYIEky">https://drive.google.com/open?id=190g6oy1AQC72nnkSMMY79ik33HfYIEky</a>
- Youtube demo: <a href="https://www.youtube.com/watch?v=wc88kT5OEdg">https://www.youtube.com/watch?v=wc88kT5OEdg</a>

### Android and iOS project localization - Python

I have created an Android and iOS string translator using Python and GCP supporting bulk translation to 104 languages.

- Github:
  - https://github.com/bikcrum/Android-String-Translator-GCP
  - https://github.com/bikcrum/iOS-String-Translator-GCP

### **Sharebyte - React, Firebase, Cloud Functions**

A shareable and disposable document that can be shared with anyone in the world and do real-time writing together.

- Useful for tutoring and teaching purpose
- Useful for professional work for colleagues
- Useful for corporate for the interviewing process
- Project Link: <a href="https://docs.bikcrum.com">https://docs.bikcrum.com</a>

### Lab Reporting Web app - React, PWA

Light-weight medical laboratory reporting app made to produce reports and print it out.

- Highly cached for faster loading
- Save and restore reports of patients
- Auto-fetch date field, Auto-save doctor's information
- Works offline and is installable in Windows, macOS, Android, and iOS
- Project Link: <a href="https://demo.labscript.co">https://demo.labscript.co</a>

## **Hobby projects**

## Smart home companion - Internet of Things

Talk to your home appliances and get things done

- Chat / Talk with home devices like human
- Control home appliances, close/open doors, turn off gas when food is cooked, etc. from your smartphone.
- Awarded as Young Scientist in Nepal Youth Science Summit 2017.
- Link for PDF: https://drive.google.com/file/d/19Olgf9vx-XzChEpPcE\_d9x9unK\_ez3lo/view

### Persistence of vision - Internet of things

Using POV to display text and simple figures in a straight array of LEDs while rotating it. The data is sent from the smartphone and can be changed in real-time.

- Project Link 1: https://www.youtube.com/watch?v=ImwYmqXbMDI&feature=youtu.be
- Project Link 2: <a href="https://www.youtube.com/watch?v=bnc">https://www.youtube.com/watch?v=bnc</a> VAAsCus

### **Smartphone operated car - Mechatronics**

Made the use of a smartphone gyroscope for emulating real-world driving experience in a small model.

• Project Link: <a href="https://www.youtube.com/watch?v=dGnpTtRBH70">https://www.youtube.com/watch?v=dGnpTtRBH70</a>

### **Self-balancing tray - Mechanics**

Demonstration of how gyroscopes can be used to balance the object supported in a wobbling base.

Project Link: <a href="https://www.youtube.com/watch?v=2xUGa\_IFndg">https://www.youtube.com/watch?v=2xUGa\_IFndg</a>

#### More at:

https://www.youtube.com/channel/UCunLAPCf59eMkSpkTW20ZCA

## **Certifications**

## International Conference on Innovation sponsored by IEEE

Certified for providing technical support.

## **CNN for Computer Vision with Keras and TensorFlow in Python**

Link: https://www.udemy.com/certificate/UC-5fcd0d5e-20d2-4c86-ac22-c92a78d68c31/

## Awards

## Young Scientist | Brainycube organization

JUNE 2017

Awarded for Poster presentation and Demonstration on project **Smart Home Companion**.

## Mr. Academician | Rungta College of Engineering and Technology

**JUNE 2017** 

Awarded for Excellent Academic Performance, obedience, and well rapport with faculties.

## Pro-Presenter | Beacon Club, Rungta college of engineering and technology

JUNE 2016

Awarded for PowerPoint presentation on the topic **Smarter Every Day** for the best topic and presentation.

Updated on Mar 29, 2022
The end