# Lakhan Tanaji Kadam

(+91) 91135 51328 | lakhankadam1@gmail.com | LinkedIn | GitHub | Website

## Education

• Lovely Professional University
Bachelor of Technology, Computer Science (GPA: 9.1/10.0)

Punjab, India Aug 2014 – June 2018

# Work Experience

Xperi Corporation
 Software Development Engineer | Python, Java, C, Clojure, Cython, Shell

Bengaluru, India Nov 2019 - Present

- Developing core algorithms for Advanced Search and Recommendation.
- Implementing new features for the Conversation product.
- Developing and integrating data publish pipelines for multiple customers.
- Data generation and data merge optimization.
- TiVo Corporation

Bengaluru, India

Software Development Engineer | Python, Haxe, C++, JavaScript, Shell

July 2018 – Oct 2019

- Developed core functionality for TiVo STBs.
- TiVo App development for Android Tv, Apple Tv and Web.
- $\circ$  Developed HDR, VOD, SOCU and SCTE-27 subtitle feature for TiVo STBs.
- Extraction and analysis of STB and TiVo app logs.
- TiVo Corporation

Bengaluru, India

Software Development Engineer Intern | Python, Haxe, C++, JavaScript, Shell

Jan 2018 - Jun 2018

- HDMI-CEC feature development for TiVo STBs.
- Optimized translations delivery for multiple languages.
- Optimized feature and regression testing for TiVo STBs.
- Developed tool to monitor service minds availability.
- TiVo Corporation

Bengaluru, India

Software Development Engineer Intern | Swift, Objective-C, Python, C, JavaScript

Jul 2017 - Dec 2018

- Developed application features for TiVo iOS app.
- Optimized regression and smoke testing for TiVo mobile app.
- Fixed and dev tested bugs for TiVo mobile app.
- · Optimized memory management for TiVo mobile app.
- · VenturePact LLC

Punjab, India

Software Development Engineer Intern | MongoDB, Express.js, Angular, Node.js

Jun 2017 - Jul 2018

- Developed placement portal for students.
- · Optimized website performance and regression testing for placement portal.

#### **Technical Skills**

- Programming languages: Java, Python, C/C++, Haxe, Closure, JavaScript, Shell
- Libraries: NLTK, PyTorch, Keras, TensorFlow, Scikit-learn, Pandas, SpaCy, Gensim, Wapiti, Numpy
- Databases: MySQL, PostgreSQL, Redis, MongoDB, GraphQL
- Stack: NLP, NER, CRF, RASA, AWS Cloud, Docker, DVC, Supervisor, Jenkins, ELK, Zabbix, Apache
- Frameworks: Django, Flask, Angular, jQuery
- Developer Tools: GitHub, Jira, Confluence, Gitlab, VS Code

### **Patents & Publications**

- Systems and Methods for Improving Content Recommendations Using a Trained Model (us 16/806,991, us 16/806,995) [Link][Draft]
  - Problem Statement: Current recommendation systems do not recommend interesting clips for a content.
  - Solution: Suggest points of interest using LSTM Recurring Neural Networks.
- Systems and Methods for Improving Comprehension in Translation Based on Context-based References (us 17/036,696) [Link][Draft]
  - Problem Statement: Current translation systems do not consider local regional factors for context references.
  - Solution: Replace entity by comparing qualities of the previous entity by giving weightage to the factors.
- Systems and Methods for Converting an Input Content Item Based on Contexts (us 17/108,180) [<u>Draft</u>]
  - Problem Statement: A word can have several meanings based on region and can mean differently in a region.
  - · Solution: Consider regional factors and replace it with another global word using knowledge graph.

## **Projects**

- · Named Entity Recognition [GitHub] | Python, Keras, TensorFlow, Numpy, Sklearn, Pandas
  - Named Entity Recognition for dataset using Neural Networks
- Text Emotion Detection [GitHub] | Python, Sklearn, SVC, LSVC, RFC, DTC
  - o Detecting emotion in text using different classifiers
- Email Spam Detection [GitHub] | Python, Sklearn, Numpy, NLTK
  - Filtering spam emails using multinomial NB
- Product Recommendation System [GitHub] | Python, Pandas, Numpy
  - Recommending products based on history and preferences
- · Seller Management App [GitHub] | JavaScript, Angular, MongoDB, Node.js, TypeScript
  - Managing shopkeeper purchase and sell of products
  - · Recommending product to shopkeepers for buying based on demand
- Perforce Shelve Patcher [GitHub] | Python
  - Script to shelve and un-shelve perforce history to and from zip

- TiVo Coins | Python, Haxe, C++, JavaScript
  - Providing coins as reward for customers watching premium VOD content.
  - Redeem coins to unlock other premium VOD content.

#### **Presentations**

- Tech Talk: Quantum Computing at TiVo (September 2019)
- Intern Showcase: TiVo Stream and STB (June 2018)
- Intern Showcase: TiVo iOS app (Jan 2018)

# **Awards & Honours**

- 4000 USD by Xperi under innovation awards (2020)
- High-5 Award at Xperi for exemplary performance (2020 & 2021)
- Runner up at TiVo Hackathon (2019)
- Runner up at CodeStorm event by ACE LPU (2015)
- Winner at AstroQuiz event (2014)
- Awarded 50% scholarship as waiver in tuition fees (2014)
- Gold medallist in International Olympiad of Mathematics (2012)

# **Competitive Programming**

• <u>LeetCode</u>: 3.5\*

• CodeChef: 2\*

## Certifications

- iOS 11 & Swift 4 The Complete iOS App Development Course [Certificate]
- Artificial Intelligence A-Z: Learn How to Build an AI [Certificate]
- Machine Learning A-Z: Hands-On Python & R in Data Science [Certificate]
- The Complete React Native + Hooks Course [Certificate]

## **Organizations**

- Armour of Care (AoC) Member
  - Helping defence veterans for recruitment in civil jobs
  - $\circ$  Serving fellow citizens in case of natural calamities
  - Providing quality education to deprived children
- Uttara Astronomy Club
  - · Organizing telescope observation events and seminars
  - Encouraging students to learn about astronomy

Sept 2018 – Present

Aug 2014 – Dec 2016