DILIP LILARAMANI

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PROFESSIONAL SUMMARY

- Entrepreneurial-spirited, technologist with 12 years of experience in Artificial Intelligence, Machine Learning (AI / ML), Computer Vision, Enterprise Architecture, Strategic Planning, Technology Direction, Design/Delivery & Implementation
- Hands-on experience in building applications using AI/ML frameworks like **Tensorflow**, **Tensorflow Lite**, **PyTorch**, **Caffe**, and mobile applications development for iPhone/iPad, Android and web frameworks like Ruby on Rails, NodeJS, Python-Django, Flask.
- Have implemented real world Machine Learning / AI / Deep Learning / Computer Vision applications using Python, Tensorflow, Keras, PyTorch, Caffe2. Ex. <u>Tripeasel Business App Demo & Food Snap App, OCR Image-to-Text (English/Korean) web app, Auto-Identity verification web app and APIs for mobile apps</u>
- Implemented and shared AI algorithms via scalable platforms like <u>Algorithmia</u>
- Created Proof-of-concept for Anti-counterfeit solution using **Blockchain** (Ethereum) called TrueVerify
- Won a **Beacon** Hackathon Created HealthStac app for calories conscious people.
- Built MVP for Retail outlets powered by Beacons <u>RetailOne Demo</u>

PROJECT HIGHLIGHTS

1. InstaHire

Website : <u>https://instahire.io</u>

Job Seeker's App Link: <u>https://play.google.com/store/apps/details?id=com.qll.instahire</u>

Employer's App Link: <u>https://play.google.com/store/apps/details?id=io.instahire.employer</u>

Description: InstaHire is an online job board for the hospitality industry. The platform allows employers to post jobs and search, and connect with candidates for job opportunities. It allows the candidate to register themselves on the platform by mentioning skills, experience, education, and apply for jobs. The product is available on the Apple/Google Play Store.

Technology: Python, Django, Android, iOS, AWS

2. Food Snap Android App

Demo Link : <u>https://youtu.be/l7xgyHInTqE</u>

Description: This app is a demo to show by just clicking a picture of the food item you will get to know the calories, carbs etc. This classifier is running on the phone so the internet is not necessary and off-course it's fast.

Technology: AI/ML/Computer Vision, Tensorflow, Android

3. OCR Image-to-Text (English/Korean) Web App

Demo Link : https://www.youtube.com/watch?v=wY4euTHPWRc

Description: This web app takes input as image or pdf and extracts the text from it. It can be used in many kinds of domain-specific OCR applications, such as receipt OCR, invoice OCR, check OCR, legal billing document OCR. They can be used for: Data entry for business documents, e.g. Cheque, passport, invoice, bank statement and receipt.

Technology: Python, Django, PIL, Tesseract

4. Auto-Identity verification web app and APIs for mobile apps

Demo Link : <u>https://www.youtube.com/watch?v=3Opy6dJNh1U</u>

Description: This automated identity verification solution combines AI, OCR and liveness detection technologies to automatically extract ID document data and validate the user's digital identity in real time.

Technology: Python, Django, PIL, Tesseract OCR, AI for liveness detection

5. Tripeasel Business Travel Booking

Demo Link : <u>https://youtu.be/IXADdthzkdo</u>

Description: Tripeasel Business is an AI driven conversational model for booking and managing business trips from the convenience of your home or office, while ensuring end-to-end personalization.

Technology: Python, Django, Conversational Chatbot, Third party booking APIs

6. Smart Refrigerator

Demo Link : NA

Description: Whenever a person reaches near to the refrigerator, then the names and quantity of items in the refrigerator (like fruits, vegetables) will be shown on the display.

Technology: IoT SDK, Microprocessor, Caffe2, Python, RISC-V

PROFESSIONAL EXPERIENCE

1. Better Team Hiring Technologies Pvt. Ltd. (Mar 2020 – Present) Role : CTO

https://instahire.io

Description: InstaHire is an online job board for the hospitality industry. The platform allows employers to post jobs and search, and connect with candidates for job opportunities. It allows the candidate to register themselves on the platform by mentioning skills, experience, education, and apply for jobs. The product is available on the Apple/Google Play Store.

2. ExaLeap Semiconductors Pvt. Ltd. (Nov 2018 – Feb 2020)

Role : Team Lead (ML/AI and IoT)

https://exaleap.ai

Description: Leading a team of 10 people and responsible for AI/Machine Learning Framework development and IoT SDK Development for RISC-V Open Source Architecture.

3. Tripeasel Technologies Pvt. Ltd. (Sep 2015 – Dec 2018)

Role : Co-founder & CTO

Product A) Tripeasel Leisure

https://tripeasel.com (closed on Dec 2018)

Description: Tripeasel is a platform that connects prospective travelers with expert travel bloggers and destination travel agents. Experts create highly personalised and affordable vacations for a traveller. Tripeasel does this with the help of our award-winning team of bloggers who have explored countless exotic beaches, tiny alleyways and mountainous terrains all over the world. Once customer approve the itinerary, we then hook you up with our destination travel agents who bid to offer you the best prices as well as ensuring world class service . A vacation planned on Tripeasel will offer inspiring and life-enriching experiences.

Product B) Tripeasel Business

https://tripeasel.com/business (closed on Dec 2018)

Description: Tripeasel Business is an AI driven conversational model for booking and managing

business trips from the convenience of your home/office/car (phone) etc. while ensuring an end-to-end personalization. Here we are using Google's dialog flow to understand the conversations intent and in backend we have built user behavioural modelling with his personal preferences to provide him better travel itineraries recommendation via vendor apis.

Responsibilities:

- Responsible for strategic planning, technology direction & vision
- Full stack development, implementation, maintenance & delivery
- Managed the team of UI/UX designers & developers
- Worked closely with CEO, marketing & operation team

4. Verizon, Boston (Apr 2015 – Sep 2015)

Description: The family tracker app allows you to know the location of your family at any time. Now you can use the GPS technology tag and connect with your iPhone to give you the peace-of-mind that you know where everybody is located (and where they have been).

Role : Senior Software Engineer (iOS)

Responsibilities:

- Participate in full SDLC process including coding, including Objective C and XML and web services.
- Provide technical assistance to other team members as needed.
- Work closely with: End users, Product owner, UAT and QA.
- Perform design documentation, unit testing, peer code review and a work under agile environment.

5. Solaro Mobile for Castlerock Research Inc. (Feb 2014 – Mar 2015)

https://itunes.apple.com/us/app/solaro-mobile/id368405914

Description: SOLARO provides age-appropriate, curriculum-aligned lessons, activities, exercises, and quizzes for grades 3 to 12 in Math, Science, and English Language Arts. It has combined study guides, interactive practice questions, and online tutoring into a comprehensive and fully integrated study solution that works across multiple platforms and is easily accessible wherever you are.

Role : Senior Software Engineer (iOS)

Responsibilities:

- Participate in full SDLC process including coding, including Objective C and XML and web services.
- Convert this application from iOS 5 to iOS 7/8 and removed unwanted code and minimized memory consumption.

- Implemented assessment/assignment ToDos feature.
- Suggested & executed "just guessing" feature in assessment question. So if user is guessing the answer so he/she can mark that question as just guessed.
- Integrated webview for html, css, javascript content within native app environment.
- Implemented social network APIs like facebook, twitter to share assessment score.
- Added crash reporter framework to get mails on crash & feedback.
- Fixed defects and crashes in existing app based on the defects and crashes notified by the UAT (User Acceptance Testing) & QA (Quality Assurance) departments.
- Provide technical assistance to other team members as needed.
- Work closely with: End users, Product owner, UAT and QA.
- Perform design documentation, unit testing, peer code review and a work under agile environment.
- Update and maintain app on app store.

Technical Environment: iOS 5.0 to iOS 8.x (iOS SDK), Mac OS X, Objective C, XCode 6.x, Cocoa Touch framework, CocoaPods, XML and PLCrash Reporter.

6. Predictive Parking (ParkAide) for Infinite Computing (Aug 2013 – Feb 2014)

http://parkaide.net

Description: Predictive parking is part of a suite of applications created for the city of Cedar Rapids, Iowa, US, intended at easing the parking problems of the city. The application works by calculating probability and availability of parking stalls using meter space data and GPS, and also provides navigation assistance to the user.

Role : Senior Software Developer (iOS)

Responsibilities:

- Interact with client to finalize the requirements, produce technical design, propose solution and provide effort estimation for the project.
- Implemented search functionality for nearby parking lots with parking availability.
- Developed the JSON parsers, which interface with the back-end web services to retrieve the data.
- Developed customized Google Map markers and integrated Core Location framework.
- Work with quality assurance team to properly test and deliver product in time.
- Interact with deployment team to properly deploy the application and provide support during maintenance phase.

Technical Environment: Objective-C, XCode 5.x, iOS SDK 7, Storyboard, FMDB (SQLite Wrapper), Google Maps, JSONLint.

7. Exhibit Sherpa for Exhibit Sherpa (Mar 2013 – Jul 2013)

Enterprise Application, <u>https://exhibitsherpa.com</u>

Description: Exhibit Sherpa is an iPad based barcode and magnetic scanning application coupled

with hardware provided by IPCPrint (http://www.ipcprint.com), business purpose for this application is to be used by stall owners at trade shows organized in the U.S. This application helps the stall owners keep track of leads, add notes to the leads, segregate leads by shows. Data can be gathered out from the system by exporting to a csv document or by printing the data through a wifi enabled printer.

Role : Senior Software Developer (iOS)

Responsibilities

- Understanding module flow through Requirement specifications PDF shared by client. It contains Flowchart, requirement specifications & Screen Flows.
- Implemented IPC Print iOS library to scan barcode & magnetic strip.
- Implemented export data (leads, notes etc) functionality as csv document and printing document through Wi-Fi enabled printer.
- Unit testing after completion of each Screen.
- Submitting application to Onsite as well as Offshore Testers through Testflight SDK.

Technical Environment: XCode 4.x, iOS 5 (iPhone SDK), Mac OS X, Objective C, Storyboard, FMDB, IPC Print library, Cocoa Touch framework, Testflight, Wi-Fi.

8. Drona Mobile for Deltecs (Dec 2011 - Feb 2013)

Enterprise Application, <u>https://itunes.apple.com/ml/app/drona-mobile/id511881819</u>

Description: Drona Mobile is developed as a product used by various organizations for their learning, development & internal communication needs. Giving a smooth experience and higher satisfaction to time-pressed executives. Users will find various modules like: Video, Newsletters, Events, Assessment, Survey, Presentation, PDF.

Role : Product Engineer (iOS)

Responsibilities:

- Designed the requirements for the application in coordination with the product owner.
- Developed download manager to download videos and tested in various bandwidths.
- Developed the JSON parsers, which interface with the back-end web services to retrieve the data.
- Implemented push notification service to notify user for new content.
- Designed the architecture of inApp purchase using third party server implementation.
- Implemented asynchronous mode to consume web services so the user interface is not stuck till the data is retrieved.
- Used localization in the app to support French and Japanese languages.
- Integrated Facebook and Twitter to share content preview.
- Implemented iOS calendar integration.
- Uploaded and maintained on app store.

Technical Environment: XCode 4.x, iOS 5 (iPhone SDK), Mac OS X, Objective C, Storyboard, SQLite, Cocoa Touch framework, inApp purchase, ASIHTTP framework, Testflight.

9. iAppreciate for OC Tanner (Nov 2010 – Oct 2011)

Enterprise Application, <u>https://itunes.apple.com/us/app/iappreciate/id458826910</u>

Description: This appreciation app helps in preparing for award presentations, send thank you notes, and track key information on all your team members within the organization. Designed to help you prepare and deliver memorable appreciation moments.

Role : Senior iOS Application Developer

Responsibilities:

- Coordinated the development of the User interface with the UI design team to match the flow of the app for iPhone, and iPad modules.
- Weekly status calls with client and collecting issues/changes.
- Implemented PDF creation tool using Quartz 2D for text and images.
- Integrated with iOS calendar app for calendar notification.
- Created customized mail content and attachment.
- Implemented local notifications to remind events, anniversaries etc.
- Used core text and core graphics framework to create image from text.
- Unit testing & code review simultaneously.

Technical Environment: XCode 3.x, iOS 4 (iOS SDK), Mac OS X, Objective C, Interface Builder, SQLite, Cocoa Touch framework.

10. iFind Fishing for Med Creations (Dec 2009 – Oct 2010)

http://itunes.apple.com/us/app/ifindfishing/id372352004

Description: This application allows user to find fishing location in 50 miles diameter. The list of venues describes necessary information according to user's current location. The app provides weather condition up to next 5 days, venue detail information, direction to venue, distance from current location. User can add their experience as comments with photos.

Role : iOS Application Developer

Responsibilities:

- Worked on the architecture of the application after reviewing the initial mockups and design.
- Designed screens using Interface builder, and core graphics.
- Perform design documentation, unit testing, peer code review and a work under agile environment.
- Implemented weather (<u>http://www.worldweatheronline.com</u>) API to get weather information.
- Implemented Google Maps to mark fishing locations within 50 miles.
- Fixed defects and crashes in existing app based on the defects and crashes notified by the UAT (User Acceptance Testing) & QA (Quality Assurance) departments. Used localization in the app to support French and English languages.
- Uploaded and maintained app on App Store.

Technical Environment: XCode 3.x, iOS 4 (iOS SDK), Mac OS X, Objective C, Interface Builder, SQLite, Cocoa Touch framework, Google Map.