



# Nirbhay Pherwani

Co-Founder@Chattodo | Full Stack Software Engineer | ML Explorer | MII and Multiple Hackathon Winner | Ex - JP Morgan Chase | Graduate Student@RIT | MicroMasters@Columbia

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An individual with strong background in computer science and experience in data analytics and machine learning. A full stack developer with experience in working with Python, Java, Flask, Node.js and NoSql databases like Redis and Mongo, relational databases like MySQL and OracleDB. Has been a part of various government research teams in DRDO and BARC. A serial hackathon winner, with over 8 victories in his name organized by government organizations like Make in India to top institutions like the IIT's to Fortune 500 Companies like JP Morgan and Standard Chartered. Has been covered by the The Hindu, DNA, The Times of India, The Economic Times, Navbharat Times, InShorts, TheBetterIndia and many other regional newspapers and blogs.

## EXPERIENCE

### Co-Founder Chattodo

02/2018 – Present Mumbai, India  
<http://chattodo.co> : *Chattodo is a productivity app packaged as a chat first app. The product has been designed keeping in mind a fundamental truth about communication, that communication must be immediately followed by action. Everything else about productivity from channels to integrations, is secondary. Also, notes is, communication with self.*

#### Achievements/Tasks

- Currently building Chattodo, a product where one could gain insightful knowledge on the basis of accomplishment of tasks with just some people collaborating over chats towards completing a project. We at Chattodo are trying to make this possible by building an environment to observe conversations around tasks discussed and marked as done. We will try to recognize knowledge that must have been earned in the act of completing those tasks and also assign a metric to it so that it can help for the purpose of assessment and thus candidate evaluation and validation.
- Google Play Store: [https://play.google.com/store/apps/details?id=com.alpha.todoed.chattodo&hl=en\\_US](https://play.google.com/store/apps/details?id=com.alpha.todoed.chattodo&hl=en_US)
- Product Hunt: <https://www.producthunt.com/posts/chattodo>
- Medium: <https://medium.com/preseeded/our-social-network-of-action-chattodo-60357fd2b078>

### Project Consultant Standard Chartered

10/2017 – 03/2018 Multiple Locations

#### Achievements/Tasks

- Worked on a project which involved mitigating fraud risk related to duplicate invoicing. Built upon Machine Learning techniques like Support Vector Machines to achieve the same.

### Technology Analyst JP Morgan Chase & Co.

07/2017 – 11/2017 Mumbai, India

#### Achievements/Tasks

- Worked on Distributed Ledger Technology in a Trade Processing System that accepts trades in various formats and converts them all to a unified format to make further amendments on it.
- Stack: Java, Mule ESB, SQL, XML, JSON
- Ranked first at the yearly "Flow Monster Hackathon" in the Global Technology Analyst Program for incoming technology analysts.

## SKILLS

C

Java

Python

R

HTML

CSS

Bootstrap

JavaScript

jQuery

AJAX

JSON

PHP

Flask

ASP.NET

Node.JS

Android

MySQL

Microsoft Sql Server

Redis

Cloud FireStore

Firebase RealtimeDB

Firebase Cloud Functions

FB Remote Configs

Amazon Web Services

Heroku

Predictive Analytics

Weibull Analysis

Numpy

TensorFlow

Keras

Scikit-Learn

git

Software Documentation

Adobe PP

Adobe AE

## PERSONAL PROJECTS

### Fleet Management System (06/2016 – 04/2017)

- BE Final Year Project based on Fuzzy Q learning in TensorFlow , Training an ANFIS.
- The proposed system aimed at maximizing revenue of cabs as individual entities and the cab aggregator simultaneously. User requests are classified into different regions based on decision tree regression. Neuro Fuzzy system is used to evaluate the eligibility of taxis to contest for these hotspots which is trained using Q Learning, used for taxis for eligibility for rides, to maximize revenue for both cabs and cab aggregators.
- Technologies Used: Python, TensorFlow.
- GitHub: <https://github.com/nirbhayph/Fleet-Management-System>

### Blipper (03/2017 – Present)

- Working with the folks from Google Cloud Partner Program and GC towards building an intelligent emergency assistant which can help evaluate how grave the situation is (to accordingly notify the hospitals and get prepared for the situation), apart from the usual tracking and notifications being sent out to your emergency contacts.
- GitHub: <https://github.com/nirbhayph/Blipper>

## EXPERIENCE

### Full Stack Developer

#### Preseed Ventures

05/2017 – 09/2018

Multiple Locations

Inspiring ideas, faith and action, Preseed is a startup advisory company. We are building Preseed's Preseeded to give freedom to people to pursue their loftiest, unchained visions. To know more about Preseed visit <http://preseed.in/>. I am also a partner at Preseed Web Lab. PWL is about Preseed's own product ideas getting translated to Minimum Viable Products. If you are an inspired AI enthusiast, hacker, hustler, or a designer who could build with us web/mobile products go ahead and send in your applications to us! <http://weblab.preseed.in/>

### Software Engineer

#### KeyQual Technologies Pvt. Ltd.

10/2015 – 02/2017

Mumbai, India

KeyQual Technologies Pvt. Ltd. a Govt. of India affiliated "Innovative" Startup. (DIPP149). Keyqual got supported by NASSCOM 10000 Startups, E-Sparks Viridian Accelerator, IvyCamp, Youth4Work, Smeep Technologies, Nityam i-Tech (Software Distribution) & The Resume Company.

##### Achievements/Tasks

- While working at KeyQual I built a couple of chatbots for the company. NetXit is a chatbot for an online work exchange platform for connecting B2B and B2C. Keyhire chatbot targets the social hiring segment with functions such as Job Search, Applications, Evaluations and Corporate - Candidate Reverse Connect.
- These are retrieval based bots built using Tensorflow, NLTK, Dual Encoder LSTM, numpy, pandas and use the ubuntu dialog corpus for conversational needs and a redis database in the background for retrieving data related to the specific chatbot.

### Data Analytics Intern

#### Mahindra & Mahindra

01/2016 – 02/2016

Mumbai, India

##### Achievements/Tasks

- Analyzed data on Automotive Car Components and developed a Predictive model for survival and failure of the same.
- The technique used for modeling failure was Weibull; and Kaplan Meier, Nelson Aalen were the methods used for analyzing survival of the components.
- In addition to the above, also analyzed Sales data (Bolero Sales in Chennai) and predicted sales forecast of upcoming 6 months for the same using the ARIMA Model.
- Paper I - International Journal of Science Technology & Engg. [https://www.slideshare.net/slideshow/embed\\_code/key/ntS3W1UFnscpgE](https://www.slideshare.net/slideshow/embed_code/key/ntS3W1UFnscpgE)
- Paper II - International Journal of Advance Research in CS. [https://www.slideshare.net/slideshow/embed\\_code/key/pQcbqr e1YBAjh5](https://www.slideshare.net/slideshow/embed_code/key/pQcbqr e1YBAjh5)
- GitHub - <https://github.com/nirbhayph/Arima-Model-to-Forecast-Sales>
- GitHub - <https://github.com/nirbhayph/Weibull-and-KM-Analysis-to-Determine-Failure-and-Survival-Rates>

### Android Development Intern

#### Velociti Pvt. Ltd.

02/2016 – 04/2016

Bangalore, India

##### Achievements/Tasks

- Developed an android application to manage an optimized solution for local logistics and transportation needs for both businesses and consumers in the urban areas.
- Technologies Used: Android, Node.js, Socket.IO, PostgreSQL, Google Maps API, Tookan API, JSON, AWS.

## PERSONAL PROJECTS

### Cimpress Chatbot (01/2017 – 03/2017)

- Vistaprint chatbot is a conversational software agent that can work with the customer to help him make customised products on the go.
- Technologies used: Flask, NLTK, Redis, Google Cloud Vision and Heroku for deployment.
- GitHub: <https://github.com/nirbhayph/Retrieval-Based-Chatbot>

### Logistics Management System (06/2016 – Present)

- LMS is an optimized solution for local logistics and transportation needs for both businesses and consumers in the urban areas. Following functionalities were implemented within the applications: Real Time Location Tracking, Authentication, Map Integration, Order Placing, Payment, Receipt Generation, Tookan API Integration.
- Technologies Used: Android, Node.js, Socket.IO, PostgreSQL, Google Maps API, Tookan API, JSON, AWS.
- GitHub: <https://github.com/nirbhayph/Logistics-Management-System>, 10+ forks and stars on GitHub.

### Mu-Stego (10/2016 – 10/2016)

- Hides text or files inside audio files and retrieve them automatically.
- GitHub: <https://github.com/nirbhayph/Mu-Stego>

### Automated Irrigation System with Predictive Analysis of Crop Growth. (02/2016 – 02/2016)

- Collection of data through sensors from the field on which the crop growth depends.
- Used the data to automate the irrigation system using a micro-controller.
- Did a data analysis to predict the crop growth and food production.
- For the implementation part we used an Arduino, a Motor Driver Shield, sensors and R Programming
- This was the winning project at the Make In India Hackathon 2016 organised by IIT Bombay.

### Job Portal [KeyHire] (10/2015 – 02/2016)

- Developed a responsive Job portal for KeyQual Technologies which had the following functionalities: Mobile Compatibility, Authentication, User Acquisition, SSL Certification, Runtime Notifications, Google Maps API Integration (Dynamically), Pagination, Filters, Social Sharing.
- Extracted data (in structured form) from web portals in huge numbers and managed storage of the same in the database at runtime.
- One of the key features in the making was the creation of a sub job portal dynamically just at the press of a button along with a completely responsive admin dashboard for the new registration.
- Technologies used: HTML, CSS, JavaScript, JQuery, PHP, Python, AJAX, Angular JS, JSON, MySQL.

### One Pager [The Other Circle] (01/2016 – 01/2016)

- Developed the company website [www.theothercircle.co](http://www.theothercircle.co)
- Also created a responsive admin dashboard (CMS) to manage the content of the web page.
- Technologies used: HTML, CSS, JavaScript, JQuery, PHP, MySQL, AJAX.

### Feedback Management System (09/2015 – 09/2015)

- Developed a Feedback Management System for the college that automates the process of collecting feedback and also analyses the same and presents results in graphical form to the department heads so that they get a good idea about their faculty members when it comes to numbers.

### LetsCompete (07/2017 – Present)

- Developed an Automated Focused Crawler for scraping out productive data relating to competitors and a Web based solution to display the same. Technologies Used: Python (BeautifulSoup and Pattern Matching), PHP Laravel Framework, Redis and AWS for deployment.

### YesList (12/2016 – 03/2016)

- YesList is an Android app which manages events for a company, a hotel, or any similar organization. In addition to that from the user side it helps in finding the best events according to the user's choice and location.

### Troplay (05/2017 – Present)

- Used a network of RPis to create an offline distribution system, where content can seamlessly be viewed. Developed an android app to act as a client to view content, that is pushed onto the Pi via AWS servers.

## EXPERIENCE

### Android Development Intern

Big Rattle Technologies

10/2015 – 10/2015

<https://www.bigrattle.com>

Mumbai, India

#### Achievements/Tasks

- Developed an Android Client for Google Adwords which automates the process of keyword bidding and managing campaigns.
- Technologies used: Android, Google Adwords API, OAuth 2.0., PHP.

### Web Development Intern

Air India

07/2015 – 07/2015

Mumbai, India

#### Achievements/Tasks

- Developed the company website and inquiry portal for Air India Engineering Services Ltd.
- Technologies used: HTML, CSS, JavaScript, JQuery, ASP.NET, SQL.

## VOLUNTEER EXPERIENCE

### Guest Speaker

Indian Institute of Technology

02/2017

Mumbai, India; Kharagpur, India;  
Guwahati, India; Kanpur, India

#### Tasks/Achievements

- Guest Lecture on deep learning for natural language processing and how it can be used to build better chatbots.
- Received a 98% positive overall response.

### Technical Officer

Computer Society of India

07/2017 – 10/2015

Mumbai, India

#### Tasks/Achievements

- Conducted workshops on Python, PHP, and Linux powered by Indian Institute of Technology, Bombay. Managed technical events for the committee. In addition to that also created videos for high-profile events using the Adobe Suite (AE and PP).
- Youtube: <https://www.youtube.com/watch?v=Ae5F9W1eYwQ>

### Co-Core Technical Assistance Committee

Praxis

06/2017

Praxis is the inter collegiate technical festival of Vivekanand Education Society's Institute of Technology affiliated to University of Mumbai

#### Tasks/Achievements

- Conducted workshops on Python, PHP, Chatbots, Web Crawling for more than 300+ students and received a stupendous response.

## EDUCATION

### Masters - Information Sciences & Technologies

Rochester Institute of Technology

08/2018 – 08/2020

Rochester, New York

### MicroMasters - Artificial Intelligence

Columbia University

06/2018 – Present

New York City

#### Courses

- Artificial Intelligence
- Robotics
- Machine Learning
- Animation and CGI Motion

### BE Computer Engineering

University of Mumbai

07/2013 – 08/2017

Mumbai, India; (8.61/10)

## AWARDS & HONORS

### Make in India Hackathon [IIT Bombay] (02/2016 – 03/2016)

Ranked first at the 2016 Hackathon organised by Indian Institute of Technology, Bombay. The project topic was: Automated Irrigation System with Predictive Analysis of Crop growth.

### Facebook and IIT Bombay ESummit 2017 Hackathon (03/2017 – 04/2017)

Ranked first at the 2017 Hackathon conducted by IIT Bombay powered by Facebook, VistaPrint. The project topic was: Cimpres Chatbot.

### Standard Chartered Technology Hackathon (08/2017 – 09/2017)

Ranked first at the 2017 Standard Chartered Tech Hackathon. Built a Support Vector Machines based application to mitigate fraud risk related to duplicate invoicing.

### Flow Monster @ JP Morgan Chase & Co. (07/2017 – 08/2017)

Ranked first at the yearly "Flow Monster Hackathon" in the Global Technology Analyst Program for incoming technology analysts.

## PUBLICATIONS

### Taxi Fleet Management System

International Journal of Advanced Research in Computer Science (IJARCS) | Volume 8, No. 1, Jan-Feb 2017.

### Predicting Hotspots and Managing Taxi Fleet using ANFIS and Q Learning on NYC Data

Springer Journal - Neural Computing and Applications

### An Application For Computing Failure And Survival Rates Of Auto Components

International Journal of Advanced Research in Computer Science (IJARCS) | Volume 8, No. 9, November-December 2017

### Using Arima Model to Forecast Sales of an Automobile Company

International Journal of Science Technology and Engineering (IJSTE) | Volume 4, Issue 5

### Virtual Reality Based User Authentication System

International Journal of Science Technology and Engineering (IJSTE) | Volume 4, Issue 4

## INTERESTS

Cricket

Music

Movies

Travel

Foodie