

## Contact

[www.linkedin.com/in/indranildchandra](http://www.linkedin.com/in/indranildchandra) (LinkedIn)  
[about.me/indranilchandra](http://about.me/indranilchandra) (Personal)  
[vizualize.me/indranildchandra](http://vizualize.me/indranildchandra) (Portfolio)

## Top Skills

Machine Learning  
Deep Learning  
Rapid Prototyping

## Languages

Hindi (Native or Bilingual)  
English (Professional Working)

## Certifications

Conflict Management  
Neural Networks and Deep Learning  
The Art of Public Speaking  
Introduction to Intel® Distribution of OpenVINO™ toolkit for Computer Vision Applications  
Structuring Machine Learning Projects

## Honors-Awards

Young Innovator Award  
Winner - AIOTA Conference  
Winner - BIRAC Hackathon  
Panasonic Award - RoboCon  
Runner's Up Award - RoboCon

# Indranil Chandra

Senior Machine Learning Engineer @ Aditya Birla Finance Ltd. |  
Software Innovator @ Intel  
Mumbai Suburban

## Summary

Innovator | Maker | Engineer | Researcher | Healthcare Hacker |  
Aspiring Social Entrepreneur

My expertise lies in identifying problems, conceiving ideas to solve it and transforming the idea into a minimum viable product with my rapid prototyping and team building skills.

Keynote speaker at Google DevFests, Developer Weekend and winner of 11 hackathons; experienced in leveraging ML/DL techniques to deliver consumer-centric products.

Appointed by Inter Institutional Inclusive Innovations Centre (i4c) committee, Government of India as a Healthcare Industry Expert & Evaluator for Smart India Hackathon. Smart India Hackathon is the largest student hackathon held in India organized by the Government of India.

My motto in life is - "To become a better human being and help others".

My areas of interest include Machine Learning based Computer Vision, Data Segmentation algorithms, Real-time distributed processing and Process Optimization Design.

I am passionate about building affordable medical diagnostic & screening devices, assistive and AAC (Alternative & Augmentative Communication) devices.

I strongly believe that problem solving is an art that can only be mastered with creativity!

"Este corazón quiere más!"

## Experience

Aditya Birla Finance Limited  
Senior Machine Learning Engineer  
May 2019 - Present (1 year 4 months)  
Mumbai, Maharashtra, India

Working in Data Science team of Digital Lending business at Aditya Birla Finance Ltd. (an Aditya Birla Capital company) on transformative digital lending solutions leveraging Machine Learning and Deep Learning techniques.

Intel Corporation  
Intel Software Innovator  
April 2019 - Present (1 year 5 months)  
Mumbai, Maharashtra, India

- Focusing on expanding and facilitating communities of innovators building projects/products using Intel's hardware/software offerings.
- Primarily working on optimizing and running ML/DL models on the edge, SLAM robotics and leveraging latest from the world of Intel's technology portfolio for building solutions for a cause.

Agnostech Innovations  
Machine Learning & Deep Learning Consultant  
April 2019 - December 2019 (9 months)  
Mumbai, Maharashtra, India

- > ML/DL Consultant:
  - Onboard as a ML/DL Consultant to help startups build scalable products in a technology agnostic way.

- > ML/DL Trainer:
  - Conduct applied Machine Learning and Deep Learning trainings for colleges and corporates.
  - Trainings offered: ML 101, Data Science Executive Primer, Knitting your first Neural Network, Machine Learning bootcamp, Applied Deep Learning bootcamp.

LV PRASAD EYE INSTITUTE HYDERABAD  
Innovator  
July 2016 - July 2016 (1 month)  
Srujana Innovation Centre, Hyderabad

Pediatric Perimeter is a novel, first of its kind device to measure the side vision of infants. The procedure of quantifying visual field is called perimetry. This

device is used on children with potential disease to cause a visual field defect such as glaucoma, retinitis pigmentosa, Retinopathy of Prematurity, etc. It involves checking the eye/head movement of an infant to a visual stimulus in particular areas in the visual field using various tests in perimetry involving LEDs fitted inside the Pediatric Perimeter. Currently, the clinician has to acknowledge the reaction from the children during testing inside a Pediatric perimeter. Doing it manually leads to error in the reaction time calculation. Automating this process would help in reducing this human error and help in getting more accurate readings.

Developed a Segmentation algorithm to track gaze of babies in real-time using Viola-Jones Face Detection algorithm and Fast Radial Symmetry Transform.

Godrej & Boyce Mfg. Co. Ltd.  
Research and Development Engineer (Intern)  
May 2016 - June 2016 (2 months)  
Mumbai

Brainstormed, researched and developed a prototype of Godrej Cooking Aid Probe and Godrej Cooking Aid Android Application. Cooking Aid Probe is a temperature probe used to monitor heat and temperature of the food during the cooking process and synchronize it with the Android Application in real-time to provide an entire Cooking Aid eco-system.

Was primarily involved in System design, Data flow design and Code implementation of Godrej Cooking Aid Probe.

IIM Calcutta Innovation Park  
Social Entrepreneur  
January 2016 - January 2016 (1 month)  
IIM Calcutta

Innovator and Founder of "Dhvani - Sharing a Voice" which was one of the top 10 Social Enterprises in Tata Social Enterprise Challenge (TSEC), 2016. Also attended a series of workshops during the competition on topics like B-Plan basics, Pitching, Story telling, Legal aspects, Statutory Compliance and Digital Marketing.

MIT REDX  
Innovator  
July 2015 - July 2015 (1 month)  
L.V. Prasad Eye Hospital, Hyderabad

Developed a prototype of Hydro-Pro, a device used to measure the extent of Hydrophobic behavior of a prosthetic eye by measuring contact angle between a stained droplet of water and the prosthetic eye surface. The quantification of Hydrophobic behavior of a prosthetic eye helps in its maintenance by ensuring that after inserting inside a human eye socket lipids don't accumulate over the surface of prosthetic eye and hence avoid irritation.

## JSW Steel Ltd

In-House Consultant (Intern)

May 2015 - July 2015 (3 months)

Mumbai and Vijayanagar

Identified applications of RFID (Radio Frequency Identification Device), and GPS based tracking for improving productivity and proposed a comprehensive solution design along with a Return-on-Investment (ROI) for implementation of the same.

Also analyzed Logistics data of JSW Steel Ltd. Vijayanagar plant and quantified its Inefficiency (~50%) using Data Analytics (Outlier Analysis techniques).

## Society of Robotics and Automation, VJTI

Projects, Finance and Publicity Manager

June 2013 - June 2015 (2 years 1 month)

Mumbai Area, India

Managed PR and Finance generation strategy of the society, mentored students in the process of idea generation and conducted workshops on building an Autonomous Line Follower Robot.

## MIT REDX

Innovator - Team Lead

January 2015 - January 2015 (1 month)

IIT Bombay

Prototyped WAND 2.0 (Wound Analysis Device) with improved accuracy, reliability and speed.

WAND 2.0 monitors blood flow in the sub-cutaneous tissue in real-time by constructing perfusion maps that depicts the relative blood flow velocity below the superficial tissue layer which is not visible to naked eyes.

WAND 2.0 can be used as a real time monitor by medical practitioners to track the wound healing process and hence monitor the effect of administered drugs on the wound.

Contributed to Optics setup, Electronics, Fabrication, Image Processing algorithms and Embedded Code development.

Brainstormed and executed end-to-end the entire hardware development of WAND. Also led the team and took ownership of developing the device (hardware+software) on time.

## MIT Health Tech

### Research Intern

June 2014 - January 2015 (8 months)

IIT Bombay

Researched and developed Wound Analysis Device (WAND). WAND produces perfusion map (indicating relative blood flow velocity) of wounds by imaging it and helps the healthcare practitioners in tracking the wound healing process and hence monitor the effect of administered drugs on the wound. WAND is based on the principle of Laser Speckle Contrast Imaging technique (LSCI).

Contributed to Optics setup, Electronics, Fabrication, Image Processing algorithms and Embedded Code development.

Brainstormed and executed end-to-end the entire hardware development of WAND.

Took ownership and successfully carried out Pilot Testing of WAND at various hospitals (PD Hinduja Hospital, Lokmanya Tilak Municipal General Hospital) in Mumbai, India.

## MIT REDX

### Innovator - Senior Mentor

July 2014 - July 2014 (1 month)

Hyderabad, India

Brainstormed and developed the first prototype of S.T.E.R.E.O (Stereo Tracking and Evaluation in Real time of Eye Optics) in REDx Bootcamp organized by MIT Health Tech Team, LVPEI Hospital and CYIENT.

S.T.E.R.E.O is a low cost, portable eye diagnostic device and is being developed with an aim to screen people with defects in stereo vision, without the need of an optometrist or any medical practitioner.

Contributed primarily to the Image Process Algorithms (Pupil tracking) and also calibrated the device to measure inter-pupillary distance of human eyes.

## VJTI RoboCon Team, 2014

### Pit Crew (Head)

January 2014 - March 2014 (3 months)

Member of the Mechanical Team and Pit Crew Head of VJTI RoboCon Team in National leg of ABU RoboCon, 2014.

Our team finished 2nd in National Leg of the competition and qualified for International leg of ABU RoboCon, 2014.

Team VJTI represented Republic of India at ABU RoboCon, 2014 (International), finishing in 10th position and also won the Panasonic Award.

<https://www.youtube.com/watch?v=9V0bbjlpE8>

<https://www.youtube.com/watch?v=NjL1FCfPTJQ>

<http://www.roboconindia.com/>

## VJTI RoboCon Team, 2013

### Mechanical Team

December 2012 - March 2013 (4 months)

Mumbai Area, India

Member of the Mechanical Team of VJTI RoboCon Team in National leg of ABU RoboCon, 2013 where our team finished as Semi-finalists.

<https://www.youtube.com/watch?v=OEBUYCsuLeQ>

<https://www.youtube.com/watch?v=pPpJYbSyhw0>

<http://www.roboconindia.com/>

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## Education

### Veermata Jijabai Technical Institute

Bachelor of Technology (BTech), Electronics and Telecommunication · (2012 - 2016)

### Kishinchand Chellaram College of Arts Commerce and Science

Junior College, General Science · (2010 - 2012)

### Mother Mary's English High School

SSC, High School · (1999 - 2010)