

# FALAK SHAH

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A-163, Ashoknagar Society,  
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## EDUCATION

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### **Dhirubhai Ambani Institute of Information and Communication Technology**

M.Tech, ICT

CPI : 9.96/10

Recipient of President's Gold Medal for Academic Excellence

### **Nirma University**

B.Tech, Electronics and Communication

CPI : 8.31/10

## TECHNICAL STRENGTHS

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### **Languages**

Python, C/C++, MATLAB, C#

### **DL Toolkits**

Keras, Tensorflow, Scikit Learn

### **Software & Technologies**

Apache Spark, LaTeX, Excel, HTML, JavaScript

### **Areas of Interest**

Machine Learning, Computer Vision, Digital Signal Processing

## EXPERIENCE

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### **Research Scientist, Infocusp**

June 2015- Present

- Working with our client, Cerebellum Capital (CCI) on employing Machine learning to discover and improve upon trading strategies
- Designed a portfolio optimizer for CCI which involved translating their financial domain constraints and concepts into a convex optimization problem
- Working on project "Deepdive" aimed at understanding the innards of Convolutional Neural networks. We aim to develop a library for visual representation of the network layers.
- Keeping up-to-date with the state of the art research/ tools in the fields of ML and Computer vision.

### **Graduate Teaching Assistant, DA-IICT**

July, 2013 - May, 2015

- Digital Signal Processing
- Signal and Systems
- Analog and Digital Communication

### **Intern, Indian Space Research Organization**

Jan, 2013 - May, 2013

- Designed a robust GPS receiver in Simulink. It made use of Kalman filter for seamless tracking loop operation even under severe ionospheric scintillations.

## ACHIEVEMENTS

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President's Gold Medal for Academic Excellence, 2015 Masters batch at DA-IICT

Ranked in National Top 0.25% in Graduate Aptitude Test in Engineering (GATE)

Ranked in National Top 1% in All India Engineering Entrance Examination (AIEEE)

Stood first in "Pixel Pundit" - a National level image processing competition organized by IISc Bengaluru and Carl Zeiss

Stood first in circuit debugging contest at a National level Techfest at Nirma University in February, 2012.

## PUBLICATIONS

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F. Shah, P. Shah and R. Dubey, "Specularity Removal for Robust Road Detection," IEEE International Conference Region 10 (TENCON), Singapore, 2016.

F. Shah, K. Shah and D. Shah, "BER performance improvement with combination of OVSF spreading and convolution code in inter satellite links using FSO," Annual IEEE India Conference (INDICON), Mumbai, 2013.

## ONLINE COURSES ACCOMPLISHED

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<b>Machine Learning</b> <i>Coursera</i>	Stanford University
<b>Statistical Learning Theory</b> <i>Lagunita Stanford</i>	Stanford University
<b>Data Scientist's Toolbox</b> <i>Coursera</i>	John Hopkins University
<b>Digital Signal Processing</b> <i>Coursera</i>	EPFL
<b>Autonomous Navigation for Flying Robots</b> <i>edX</i>	Technical Universitat De Munich
<b>Image And Video Processing</b> <i>Coursera</i>	Duke University
<b>Cryptography-I</b> <i>Coursera</i>	Stanford University

## POSITIONS OF RESPONSIBILITY

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**Placement Coordinator** Nirma University

- Facilitating placement proceedings of B.Tech, EC batch of 2013
- Responsible for developing contacts with corporate recruitment teams of several firms for placements
- Organized sessions on personality development, group discussions and mock interviews

**Organizer, Teach group**

- Formed a group of volunteers to teach some underprivileged kids at a construction site near Nirma university