# FALAK SHAH

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A-163, Ashoknagar Society, Satellite, Ahmedabad-15

# **EDUCATION**

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

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**

# 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 traking loop operation even under severe ionospheric scinitllations.

# **ACHIEVEMENTS**

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**

- 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

Machine Learning Stanford University

Coursera

Statistical Learning Theory Stanford University

Lagunita Stanford

Data Scientist's Toolbox

John Hopkins University

Course ra

Digital Signal Processing EPFL

Course ra

Autonomous Navigation for Flying Robots Technical Universitat De Munich

edX

Image And Video Processing

Duke University

Coursera

Cryptography-I Stanford University

Course ra

#### POSITIONS OF RESPONSIBILITY

# 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