# PRATHAMESH PRABHUDESAI

# COMP VISION | SIGNAL PROCESSING | S/W DEV

ppprabhu@ncsu.edu +1 (919) – 948 - 8794 www.prathprabhudesai.com

#### **EDUCATION**

AUG '15 - APR '17 North Carolina State University | Raleigh, NC

Master of Science in Computer Engineering

Fall Course Work: Digital Signal Processing, Computer

Networks, Random Processes

Current Course Work: Design and Analysis of Algorithms, Object Oriented Design and Development, Computer Vision, Pattern Recognition and Machine

Learning

AUG '9 - MAY '13 Pune Institute of Computer Technology | India

B.E. in Electronics and Telecommunication

Course Work: Data Structures, Digital Image

Processing, Speech Processing, System Programming

and Operating Systems

and Operating Systems

#### **WORK EXPERIENCE**

MAR '14 - MAY '15

## Vodafone India Services Pvt. Ltd. | Senior Executive

- Core member of Wintel Team managing Windows, Citrix, Cloud and VMware for Vodafone Global. Worked in applications and operations team for Vodafone Greece.
- Worked on different issues such as file services, print and fax services, memory and performance issues, blade hardware and storage.
   Managed the hierarchical escalations, monthly breached tickets analysis, hardware case logging and change requests.
- Automated the user UAM process with windows batch scripting. Streamlined the vendor cases for southern Europe.

AUG '12 - JUN '13

# Central Water & Power Research Station | Research Project Intern

- Designed a computer vision based open-stream water velocity profiler.
- Worked on Sediment classification and quantization.
- Dispersion analysis and Bed profiling was also the part of research.

## **PROJECTS**

## **OPNET Simulations** | Computer Networks Course Projects

- *Small Internetworks*: Performance analysis for star and extended star n/w topologies based on ethernet delay, ethernet load and n/w traffic.
- *M/M/1 Queue Modeling*: Performance analysis based on packet arrival rates, packet sizes and service capacity.
- Mixed 802.11n/802.11b/802.11g WLAN, RTS/CTS and Jammer Performance, Hidden Node Problem

## Statistical Modelling of Fish Population | Random

Processes Course Project

- Using echo SONAR sinusoidal sound pulses with Rayleigh distributed amplitudes, the school of fish was found to be normally distributed.
- The process was modeled using fish position, orientation and motion as random variables.

# **De-noising using Sub-Band Decomposition**

• Designed and implemented the Orthogonal Quadrature Mirror Filter Bank System for de-noising the sound signal.

## **Velocity Profiler** | Senior Year Thesis

- Developed an image processing based system for velocity profiling of open stream water in physical hydraulic models.
- The algorithms were based on motion tracking and *particle image velocimetry*.
- The system was developed for tackling the over-flooding in the *Navi Mumbai International Airport* area for its safety.

# **Sediment Quantization and Categorization** | Research at Central Water & Power Research Station

 Designed an innovative algorithm based on Color Gamma Correction for detection of sediment depositories. Neural networks based techniques were used for categorization.

# Accident Avoidance System | NIYANTRA 2012

• Design an autonomous embedded system for vehicular accident avoidance by location based speed monitoring and centralized control station equipped with LabVIEW®

#### **PUBLICATIONS & CONFERENCES**

- Quantization & Classification of Sedimentation of a Coastal Hydraulic Model using Image Processing Techniques
   IJRRAMCS
- Adaptive Color Gamma Correction for Sediment Classification and Quantization in a Reservoir
   HYDRO 2012, Indian Society for Hydraulics

## **SKILLS**

#### **TECHNICAL**

C/C++, MATLAB, JAVA, Python, Ruby on Rails, HTML, CSS, MySQL, VHDL, Assembly, LabVIEW, Microsoft Office

#### **CREATIVE**

Indian Classical Music, Theatrical Plays, Essay Writing

### **ROLES & AWARDS**

- Graduate Trainee Ambassador, Vodafone India Services Pvt. Ltd., 2014-15
- Second Prize, Impetus and Concepts Project competition, Image and Video Processing Category
- Inter-College Cultural Representative, 2012
- Best outgoing student, High School, RRVJ, 2007
- Maharashtra State Government Scholarship, 2001-07

#### **LINKED IN**

https://www.linkedin.com/in/prathameshprabhudesai

# **PERSONAL WEBSITE**

http://www.prathprabhudesai.com

