

## MANDAR SANJAY DESHPANDE

208, Shivelee Apartment, Trimurti Nagar, Nagpur 440022  
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### EDUCATIONAL QUALIFICATIONS

<b>Bachelor of Technology in Electrical and Electronics</b>	<b>GPA – 8.58/10</b>	(2013 - 2017)
Visvesvaraya National Institute of Technology, Nagpur, India		
<b>High Secondary School Certificate (12<sup>th</sup>)</b>	<b>CBSE Board</b>	<b>95%</b>
Narayana Vidyalayam, Nagpur, India		
<b>Secondary School Certificate (10<sup>th</sup>)</b>	<b>CBSE Board</b>	<b>94.8%</b>
Narayana Vidyalayam, Nagpur, India		

### RELEVANT COURSE WORK

Network Theory	Electronic Devices and Circuits
Integral Transform and PDE	MATLAB Programming
Signals and Systems	Digital Circuits
Control Systems - I	Control Systems - II
Electrical Drives and Control	Microprocessor and Interfacing
Power Electronics	Linear Electronic Circuits
Sampled Data & Digital Control	Digital Signal Processing
Microcontroller and Its Applications in Power Electronics	

### SKILLS

**Programming Languages:** MATLAB, C, JAVA, HTML, JavaScript, Python

**Software:** PSIM, Multisim, Photoshop, Android Studio, Eclipse

### EXPERIENCE

**Summer Internship** (May – July 2016)

Citicorp Services India Limited, Pune

- Worked as a Software Analyst in Cash Management under the Treasury and Trade Solutions umbrella
- Actively worked alongside the Global Concentration Engine (GCE) team to develop Report Configuration Utility
- Also assisted in the development of the Global Concentration Engine's functionality

**Summer Internship – Project Trainee** (June – July 2015)

Concept Development Centre, Mahindra Research Valley, Chennai

- Underwent industrial training on the basics of Tractor Electrical System
- Worked as a Project Trainee along with the Concept Development Centre(CDC) team under Build and Validation
- Successfully completed 'Auto Plough Lamp' concept under the guidance of Mr. R.R. Sakthivel, CDC Head, Mahindra Research Valley

#### **Chief App Developer**

Rentarctica , VNIT Nagpur (May - November 2015)

- Worked as the Chief App Developer for the company
- Developed the UI (User interface) and functionality for its Android application using Android Studio and Eclipse (Java)
- Ranked 3<sup>rd</sup> at the Google Startup Weekend 2015
- Rentarctica is a startup company which ranked 3<sup>rd</sup> at the Google Startup Weekend 2015. Currently mentored by VNIT Alumnus and founder of Nagpur Angels, Mr. Shashikant Chaudhari

### ACADEMIC PROJECTS AND TECHNICAL PAPER

**Meta-heuristic Algorithm for Fault Location Detection** (August 2016 - Present)

- Researched Genetic Algorithm, Simulated Annealing, Firefly Algorithm, Swarm Optimization and related applications using MATLAB
- Application of various nature based algorithms for optimization of fault location on transmission lines

### **Report Configuration Utility**

(May 2016 - July 2016)

- Configuration and data acquisition platform for onboarding of new reports and modification of existing reports
- Enables quick onboarding of new reports for Treasury and Trade Solutions at Citicorp Services India Limited
- Developed a JAVA based web Application using Tomcat 7.0, Eclipse IDE and Oracle SQL developer
- Application coded using Java Server Pages(JSP), JAVA SE, HTML, CSS, JavaScript and SQL queries
- Linked the application to cloud server using JDBC API in Java

### **Pulse Oximeter based Heart Beat Detection and Counter**

(November - December 2015)

- Designed pulse oximeter using concepts of 'Linear Electronic Circuits'
- Filtering and amplification for conversion PPG signals to near TTL pulses in two stages
- Simulated circuit design in Multisim software
- Hardware model developed after verification

### **Auto Plough Lamp (Tractor Electrical System)**

(June 2015 - July 2015)

- Developed Auto plough lamp concept for low cost application to tractor electrical system
- Used a Darlington pair of power transistor and light dependent resistance, for autonomous switching of lamp in farm environment (mention cost)
- Optimizing battery drain and can be fitted on any tractor model, as a modular add-on

### **Speed Governing System of a Steam Turbine (Simulink Model)**

(June 2015 - July 2015)

- Created analogy for Steam Turbine and Valve system by using Motor generator set
- Developed using MATLAB Simulink based control system model to demonstrate generation synchronization with the Grid
- Speed control for the motor determines generation synchronisation
- Model verified using actual VIPL(Vidarbha Industries Power Limited) plant ratings

### **CERTIFICATIONS**

- |   |                   |
|---|-------------------|
| • Machine Learning by Stanford University(Prof. Andrew Ng) on Coursera      | January 22, 2017  |
| • Programming for Everybody (Python) by University of Michigan on Coursera  | January 30, 2017  |
| • Digital Image and Video Processing by Northwestern University on Coursera | February 28, 2017 |

### **EXTRA CURRICULAR ACTIVITIES**

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|--|-------------|
| • Technical Secretary – Electrical And Electronics Engineering, VNIT Nagpur                                | 2014 - 2015 |
| • Student Mentor (Student Mentorship Program, VNIT Nagpur)   | 2015 - 2016 |
| • Student Mentor Coordinator (Student Mentorship Program, VNIT Nagpur)                                     | 2016 - 2017 |
| • Blog <a href="http://www.mandardeshpande1995.blogspot.in">http://www.mandardeshpande1995.blogspot.in</a> |             |

### **ACHIEVEMENTS AND HONOURS**

- |   |        |
|---|--------|
| • Achieved 3 <sup>rd</sup> position at Tata Consultancy Services IT Wiz- Nagpur   | (2012) |
| • Selected as a Student Ambassador among 40 students from all over India to attended seminar at the Singapore campus of SP Jain School of Global Management | (2016) |
| • Awarded top 5% Merit Certificate and Scholarship in 12 <sup>th</sup> CBSE Board Examination   | (2013) |
| • Received Amul Vidya Bhushan Award for exceptional performance in CBSE 12 <sup>th</sup> Board Examination  | (2013) |
| • Achieved 3 <sup>rd</sup> position at Football CBSE Clusters   | (2009) |
| • Secured 3 <sup>rd</sup> position at Table -Tennis CBSE Clusters, Surat  | (2010) |
| • Achieved 2 <sup>nd</sup> position at Table -Tennis DSO - Nagpur   |        |