### Dr. Vaibhay Bachuwar

Asst. Prof. Dept. of Electronic Science, School of Physical Sciences, PAH Solapur University, Solapur

Flat no. 09 Deep-joti Appt. Hotgi Road Solpaur,413003 <u>vaibhav.bachuwar@gmail.com</u> <u>Mob no. 8087373881</u>

### **Objective**

To explore the new areas and work in a dynamic stable organization, fast learner. I recently completed the doctoral degree as well as having research assistant experience at UQO funded by Resmiq and seeking an industrial opportunity to exploit my skill and make conurbation in IoT, WSN with LabVIEW based instrumentation, ANN. Practical knowledge in electronics with professional team player.

#### **Skills & Abilities**

- IoT(ESP devices), WSN(X-Bee and Wi-Fi), BLE
- Python, ANN, machine learning, deep learning, Raspberry pi
- LabVIEW, myRIO, Instrumentation, DAQ system
- MATLAB ,MULTISIM
- Biomedical instrumentation and sensors
- Microcontroller based instrumentation and system
- PCB design

### **Currently working on**

- Medical instrumentation and implementation of ANN for ECG,EEG
- digital stethoscope Audio signal processing
- Raspberry pi for portable healthcare
- LabVIEW & myRIO for portable healthcare
- python and ANN
- IoT for portable Healthcare
- Android App development

## Project by Gov. of India

- Received the project and grant for the Design and Development of Graphene-Ag based Cost Effectiv
  ECG Electrode for Cillage Society (Principle Investigator of project) by Rajiv Gandhi technological
  commission Gov. of India
- Received the project and grant for the Design and Development Advanced Prediction Model Using Artificial Intelligence for Water Irrigation: Major Agricultural Crops (Co -Principle Investigator of project) by Rajiv Gandhi technological commission Gov. of India
- Received the project and grant for the Design and Development of portable gas detectors and staff
  protection during COVID-19 (Co -Principle Investigator of project) by Rajiv Gandhi technological
  commission Gov. of India

## **Experience**

**Assistant Professor** — PAH Solapur University

Nov 2018 to till date

Post graduate teaching PIC microcontroller, 8051microcontroller,

AVR microcontroller, Digital signal processing,

LabVIEW, Matlab, Practical Lab

**Research Assistant** — University of Quebec in Outaouais

March 2018 to Oct 2018

LIMA Lab (RESMIQ grant)

**Assistant Professor** — Solapur University

June 2015 to Feb 2018

Post graduate teaching: communication system analog and Digital

PIC microcontroller, 8051microcontroller, AVR microcontroller,

Digital signal processing Practical Lab

**Lecturer** — Solapur University

June 2013 to April 2015

Post graduate teaching: communication system analog and Digital

PIC microcontroller, Practical Lab

### **Education**

PAH Solapur University — Ph.D.,

Jan 2015 to Dec 2019

Design and development of Wireless Sensor Network for Agriculture:

Water Irrigation Management

**Solapur University** — M.Sc. (Master)

Jun 2011 to Mar 2013

Electronics

**Sangmeshwar Collage, Solapur University** — **B.Sc.** (Bachelor)

Jun 2009 to Mar 2011

Electronics

#### **Publications**

- V.D. Bachuwar, Ahmed Lakhssassi, U.R.Ghodake, S.S.Suryavanshi (2019). WSN/Wi-Fi Microchip-Based Agriculture Parameter Monitoring using IoT. IEEE Xplore. 978-1-5386-5873, 214-219
- V. D. Bachuwar, A. D. Shaligram, and L. P. Deshmukh (2018). Monitoring the soil parameters using IoT and Android based application for smart Agriculture. American Institute of Physics (AIP). 10.1063/1.5047679
- Kalpak Shahane, V.D. Bachuwar and Pooja P. Gundewar. (2018). Online Detection of Subclinical Mastitis Using Electrical Conductivity. Singapore Pte Ltd. 2018 Engineering, Lecture Notes in Networks and Systems. 978-981-10-3812-9\_7
- Desai R. V., **Bachuwar V. D.**, Todkari S.M. (2018). LabVIEW based simultaneous data acquisition system for environmental parameters monitoring. International Journal of Advanced Scientific Research and Management. Volume 3 Issue 11
- **Bachuwar, V.D.**, Shaligram, A.D. and Deshmukh, L.P.(2017). Low Cost Wireless Data Acquisition System For Multisensor Applications. IJDR. Vol. 07, Issue, 08, pp.14346-14349

- V. D. Bachuwar, A. D. Shaligram, and L. P. Deshmukh. (2017). LabVIEW Based Wireless Soil Moisture and Temperature Monitoring System For Water Irrigation Management. Indian J.Sci.Res 15 (2) 186-190
- Todkari, S.M., Bachuwar, V.D. and Salunke, D. J. (2017). LabVIEW Based Cost Effective Simultaneous Data Acquisition System: Measurement of C-V of the Ferrite Thin Films. IJDR, Vol. 9, Issue, 03, 48360-48364.

# Leadership

Communication skills, Enthusiastic and Motivated, Sense of Responsibility and Critical Thinking.

### References

Upon request