# Abdul Wasay

abdulwasav.net

#### EDUCATION

•	<b>B.E. in Computer Engineering</b> Savitribai Phule Pune University; <b>Engineering aggregate:</b> 74.25%	August 2014 – August 2018 Pune, India
•	Class XII - ISC The Bishops Junior College; Percentage obtained: 81.80%	March 2014 Pune, India
•	Class X - ICSE The Bishops Co-Ed School; Percentage obtained: 87.29%	March 2012 Pune, India

#### WORK EXPERIENCE

#### Persistent Systems Ltd.

Software Engineer - BFSI division

- Forex trading platform: Part of the development team building a forex trading platform required to handle a daily average of \$7 trillion worth of forex trades for a specialist US financial institution.
- **Development of testing framework**: Developed a testing framework that enabled functional testing of the trading platform. Individually designed and developed several utility tools to support the framework. Made use of various design patterns and architectural styles.
- Functional language: Wrote several highly scalable modules for the framework in Erlang using concepts of higher-order functions, anonymous functions, list comprehension and tail recursion.
- Technology stack: Java, C++, Hibernate, Python, Erlang, Shell scripting, JUnit, CppUnit, DB2 and IBM MQ

#### MAJOR PROJECTS

#### A Blockchain based voting system

Sponsored by Persistent Systems Ltd.

- Voting system: Built a secure and robust voting system that used Blockchain to prevent vote-tampering and at the same time maintained the trust, integrity and voter anonymity within the process. Used cutting edge technology to bring major improvements to the voter authentication and vote counting process.
- Technology stack: Ethereum, Hyperledger Fabric, Flask for REST APIs, HTML, CSS, Bootstrap for front-end UI and Raspberry Pi 3 for powering the voting unit

#### Automated Customer Feedback Analyzer

Paid project for My Travel Junction (A travel agency)

- Feedback analysis: An end to end automated feedback analyzer that collected feedback data from our client's Android app and presented the data insights from the data in an interactive dashboard
- Naive Bayes Classifier: Feedbacks were classified into positive and negative sentiments, data was presented in the form of interactive charts on the dashboard thus saving time spent on manual analysis and segregation of feedback.
- Technology stack: Python, Flask for REST APIs, Bootstrap 4, Google Firebase (Realtime database, Cloud messaging and File storage)

## **Conference Management Application**

Developed for Department of Computer Engineering, PCCOE

- Easy management: Conference managers could upload all data pertaining to the conference such as the time and date for presentations of various papers, locations, guidelines and contact information
- **Convenient for Attendees:** Attendees could easily load up the app and look up relevant information, no need to search for volunteers. There was a calling feature inbuilt so one could simply dial up in case of an issue. Was deployed and used successfully in 4 major conferences.
- **Technology stack**: Android, Google Firebase (Realtime Database)

July 2018 - Present Pune. India

August 2017 - August 2018

Pune, India

Pune, india

February 2018-April 2018

January 2016 - March 2016 Pune, india

- Encrypted mail storage server: An SMTP server implemented in Python that encrypted all mails received from SMTP clients using the AES algorithm and stored them in an SQLite database.
- Real estate price prediction program: A neural network implemented in Python and trained on the Boston Housing Information Dataset to predict capital appreciation in real estate prices.

# PROGRAMMING SKILLS

Languages & technologies: C++, C, Python, Erlang, Shell scripting, Java, Android, Haskell, LATEX.
Web development: HTML, CSS, Bootstrap 4
Tools: Git, Docker, gdb (GNU debugger), gnuplot, gcov, Make, Maven
Frameworks: Hyperledger Fabric, Flask, Hibernate
Operating systems: Linux, Windows
Databases: IBM DB2, MySQL, SQLite, MongoDB

# PUBLICATIONS

• Prediction Models for Real Estate Prices: A Comparative Study Abdul Wasay, Aishwarya Murkute, Vinit Vaichole, Rohan Rao and Deepa Abin, presented at IEEE-Pune Section and PCCOE's (Pimpri Chinchwad College of Engineering) 3rd International Conference on Computing, Communication, Control and Automation 2017 (ICCUBEA 2017).

• Design and Implementation of a Secure and Robust Voting System based on Blockchain Ankush Pathak, Abdul Wasay, Chandan Singh, Ritvik Bhavan, Dr. Jayant Umale. International Journal of Advance Research, Ideas and Innovations in Technology (IJARIIT).

# Patent

# • SECURE AND ROBUST VOTING MACHINE

Intellectual Property, India. Abdul Wasay, Ankush Pathak, Chandan Singh, Ritvik Bhavan, Dr. Jayant Umale, published in the Indian Patent Journal No.: 44/2019 dated November 1, 2019 with application number: 201821015256.

WINTER SCHOOLS

#### • Winter School on Software Engineering (WSSE) 2017, TCS Research and ACM India Part of 60 students selected from over 500+ Bachelors, Masters and PhD applicants across India. Topics

Part of 60 students selected from over 500+ Bachelors, Masters and PhD applicants across India. Topics studied included program analysis, formal program verification methods, abstract interpretation and usage of programming languages like F\* to derive formal proofs.

# • Persistent Systems Winter School 2016

Part of 30 students Selected by Persistent Systems Ltd. from nearly 150+ shortlisted students across Pune. Studied aspects of functional programming and algorithm analysis ( w.r.t memory usage & time and space complexity)

# Honors

# • Performance Award, Persistent Systems Ltd.

Awarded the High Five performance award for successfully designing, developing and releasing a major feature in the core product of the team I am a part of.

# • Google Student Facilitator (Applied CS Skills)

Selected by Google Inc. from applicants nationwide as a Student Facilitator for Google's Applied CS with Android programme. Conducted 3 hands-on coding workshops on behalf of Google to strengthen the core CS concepts of university students.

### • Best Final Year Project Poster Award

Won the best poster award for my final year project titled "A Secure and Robust Voting Machine" among 50 competing teams at the Dept. of Computer Engineering, PCCOE.

### • President of the PCCOE ACM Student Chapter

Led a team of 32 driven individuals along with numerous volunteers to propagate ACMs vision of advancing computing as a science and profession. Our chapter was awarded the runner up prize by ACM India for the Best Student Chapter in India.

• Member of the Departmental Advisory Committee (DAC), Dept. of Computer Engineering, PCCOE

The DAC consists of 19 respected members from industries and academia, mostly associated with ACM India. I am responsible for contributing and evaluating the future plans of the department in terms of research, curriculum, accreditation, teaching methodologies, curricular and extra curricular activities, and for suggesting new ideas/improvements to existing structures.

## • National Finalist in the Smart India Hackathon 2017

Part of the team of 5 that represented our college at the national finals of the Smart India Hackathon 2017. Around 25 teams were selected from more than 80 submissions.

### • Appreciation for performance in Engineering Mathematics-1

Professor's official appreciation for being one of the highest scorers in Engineering Mathematics-1 in the class of 72 students.

### TALKS

## • gnuNify 2019

15th February, 2019

Invited to deliver a talk on Ethereum at gnuNify 2019, Pune's oldest open source conference.

### • KPIT Sparkle

#### 23rd February, 2019

Invited to deliver a talk on "Navigating the Blockchain" at KPIT Sparkle 2019, an annual national level innovation contest conducted in India by KPIT.

### EXTRA-CURRICULAR ACTIVITIES

### • Creative Committee Lead, Spectrum 2015

Led the Creative Committee at Spectrum 2015, a State Level Technical Inter-Collegiate fest Interview featured in Pune Mirror (a prominent city daily) article titled "Learning on the Job" (Pages 10-11), dated December 14, 2015.

### • Public Relations Volunteer, Make a Difference

Worked for 2 years as a volunteer for the Pune Chapter of Make a Difference, an NGO working towards ensuring equitable outcome for children across shelter homes in India. Currently active across 23 cities in India.

#### Profile

### • Interests

Writing, Reading, Graphic Designing, RC aviation and filmmaking.

### • Personal strengths

Leadership skills, communication skills, quick learner, creative and hard working.

I hereby acknowledge that all the details furnished in this resume are true to the best of my knowledge and belief.