



Airody Mohandas Pai

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Gender: Male **Date of birth:** 18/12/1996 **Nationality:** Indian

WORK EXPERIENCE

[09/08/2018 – 28/08/2020] **Software developer**

Robert Bosch Engineering and Business Solutions

Address: RMZ Ecospace, 1B Building , Bellandur, 560103, Bengaluru, India

Main activities and responsibilities:

- Developed an android based Diagnostics application for a smart kitchen assistant
- Worked as a C developer to implement Time based protocols on a vacuum cleaning robot.
- Worked in developing windows/mac based application for a 3-D Printer using Python.
- Prepared a POC to implement Encryption and Decryption for Software Update using ChaCha20 and Poly1305.
- Prepared Test Case Documents, Traceability Matrix, and followed Sprint based method.
- Continuously interacted with customers to provide updates and consolidate feedback.

[07/06/2017 – 20/07/2017] **Intern**

Biztime IT Solutions Private Limited,

City: Bengaluru

Country: India

Main activities and responsibilities:

- Developed a website to track expenses.
- Worked on deploying websites to IBM Bluemix .

EDUCATION AND TRAINING

[01/10/2020 – Current] **Masters in Computer Science**

Universität Paderborn

Address: Warburger Str. 100, 33098 Paderborn, Germany, 33098, Paderborn, Germany

[2014 – 2018] **Bachelor of Engineering**

Nitte Mahalinga Adyanthya Memorial Institute of Technology

Address: Nitte, India

Main subject / occupational skills covered:

- Secured a CGPA of 8.81

[2012 – 2014] **Pre-University Education**

Vidyodaya Pre-University College

Address: Udupi, India

Main subject / occupational skills covered:

- Completed class 12 with 86.5%

[2011 – 2012] **Secondary Education**

Little Rock Indian School

Address: Brahmavar, India

Main subject / occupational skills covered:

- Secured a CGPA of 8.8 in 10th Standard

LANGUAGE SKILLS

Mother tongue(s): Konkani, Kannada, Hindi

Other language(s):

English

LISTENING C1 READING C1 WRITING C1

SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1

German

LISTENING A2 READING A2 WRITING A2

SPOKEN PRODUCTION A2 SPOKEN INTERACTION A2

ORGANISATIONAL SKILLS

Organisational skills

- Organised coding competitions and quizzes at college.
- Volunteered to guide a group of 20 new-joiners at college.
- Took initiative in organising various activities at office.

COMMUNICATION AND INTERPERSONAL SKILLS

Communication and interpersonal skills

- Good written and verbal communication skills.
- Maintained good rapport with my peers and customers.

JOB-RELATED SKILLS

Job-related skills

- In depth knowledge on Java and Python.
- Well versed in Native Android and Windows application Development.
- Good understanding in core Computer Science concepts like Operating Systems, Computer Architecture, Data Structures and Algorithms.
- Worked on technologies like SpringBoot, AIDL, Firebase.

WORK EXPERIENCE PROJECTS

Work Experience Projects

Robert Bosch Engineering and Business Solutions Private Limited

◦ **Dremel 3D Software**

The software is responsible for connecting the user's personal device to the Dremel 3D printers to exchange information. The software is built using Python. The USB connection with the printer was established and appropriate data was transferred to and fro from the printer allowing the user to print and view the print statuses directly from their personal computer.

Technologies used - Python, QT, QML, CMake

◦ **PTP implementation for Vacuum Robot**

Implemented Precision Time Protocol, A protocol that is used to synchronize time throughout the various controllers in the robot module. Several IEEE Papers were researched and a detailed workflow was laid out for its implementation. Achieved a delta of 100 nanoseconds between the actual time and the protocol time.

Technologies used - C, CMake

◦ **Remote Diagnostics on a Smart Kitchen Assistant**

The smart device guides the user on how to cook effectively using various peripheral. The application is responsible for continuously obtaining the statuses from these various peripherals on the device and take appropriate measures. The application also serves as a medium in transporting information from the embedded layer to the UI layer, to notify the user.

Technologies used - Java, Android Studio, AIDL.

Internship Projects

- **Robert Bosch Engineering and Business Solutions Private Limited (RBEI)**

Recommendation Engine for Website

A proof of concept was developed to demonstrate recommendation of similar products to users when they add a specific product to the cart. To achieve a good accuracy a hybrid system with mixture of Collaborative filtering and Content-Based Filtering was implemented by using python libraries. A simple website was generated using flask.

Duration - 5 Months (February - May 2018)

Technologies used - Python, Apache Mahout, Flask, Jupyter

- **Biztime IT Solutions Private Limited**

Expense Tracker

The web based application supports the user in splitting their bills and expenses amongst their friends and family. The application also calculates their weekly and monthly expenditure. Intuitive UI was developed using angular and the application was deployed on the cloud using IBM cloud (formerly known as Bluemix)

Duration - 2 Months (June - July 2017)

Technologies used - Java, Servlets, AngularJS, MySQL, IBM Cloud

- **N.M.A.M. Institute of Technology**

Placements Application

The android application allows students to view and enroll for campus placements held at the college. The application also allows companies to add job details, selection criteria and the process of interviews. Students could view these data on the appealing card layout and material design. Various roles like admin, placement officers are also supported with their respective task.

Duration - 1 Month (July 2016)

Technologies used - Java, Android Studio

Other Projects

Course Projects

- **Placements Database Management System**

A database Schema was developed using Microsoft SQL. Visual Studio 2015 was used to develop form based application. Material design theme was implemented for the UI. The application could be used by both students as well as Placement department authorities. Reports were also generated by using SAP Crystal report.

Technologies used - Microsoft SQL, Visual Studio

- **CloudPad**

A cloud-based application where users can save their notes, to-do lists in the cloud and hence access it from any other device by logging into his account. Firebase is used as Backend as a Service and an android application is built by using Android Studio.

Technologies used - Java, Firebase, Android Studio

Personal Interest Project

- **German Lernen**

An android application that contains all the important tables and rules related to A1 and A2 level of the German language. The application uses Card Layouts with Fragments and Grids for an intuitive UI.

Technologies used - Java, Android Studio

- **Bricks**

An android game where the user has to deduce the 4 letter dictionary word by analysing the letters and their position within 10 turns. Each submitted word tell the brick count with which the user has to look for patterns.

Technologies used - Java, Android Studio