#### Curriculum vitae

### **Asish Biswas**

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#### Overview

I'm an experienced software engineer and a data enthusiast who loves to tackle challenges with creativity and knowledge. I like the challenges that big data brings and feel excited about big data technologies, machine learning, deep learning, and statistical analysis and how it shows the hidden insight and changing our life.

### **Experience**

## March 2018 - Data Engineer and Administrator at BMW Car IT Continuing Responsibilities:

- Design, build and manage the BigData environment with Hortonworks Data Platform (HDP).
- Writing ETL jobs on HDP to handle unstructured data.
- Building data asset for Software Pipeline Analytics project.

Technologies: Apache Hadoop, Spark, Hive, Ansible

# September 2016 - **Software Engineer at BMW Car IT** February 2018 **Responsibilities:**

- Designing and developing "Speech" middleware component for BMW headunit to enable voice control for navigation, entertainment, and other components.
- Writing communication wrapper for "Speech" middleware to communicate with different internal and external components of the head-unit.
- Maintaining BMW test racks (head-unit).
- Test and Release the "Speech" middleware component.

Technologies: Linux, C++14, Boost, Python, SQLite, GCC, CMake, Git

## September 2014 - **Software Engineer at Amadeus IT**August 2016 **Responsibilities:**

- Developing message switching middleware application to ensure guaranteed message delivery of a distributed system.
- Configuring and deploying the software.

Technologies: Linux, C++, Boost, gcc, SQLite, GCC

# October 2013 - Work Student at Siemens AG March 2014 Responsibilities:

- Developed an iPad application along with a sensor network to measure the quality of the working environment.
- Collecting different sensor's data and visualize them in a user-friendly and interactive way.

**Technologies:** iOS, Objective-C, Raspberry-Pi, C++, Libelium sensors.

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June 2012 - Research Assistant (HiWi) at Fortiss GmbH September 2013 Responsibilities:

- Developing self-balancing "Smart Office" with different sensors and actuators including power storage devices.
- Designing communication protocol in order to connect the sensors into the
- Writing wrappers for different sensors and actuators.

Technologies: Linux, Java, GWT, MySql

September 2010 - Software Engineer at Samsung Bangladesh R&D Center Ltd.

February 2012 Responsibilities:

• Developing application on Samsung's mobile development platform.

Technology: NXP, C

Education

September 2014 Master of Science in Informatics

Technische Universität München, München, Germany

**Specialisation:** Software Engineering

October 2009 Bachelor of Science in Computer Science and Engineering

Ahsanullah University of Science and Technology, Dhaka, Bangladesh

Specialisation: Software Engineering

**Training and Certification** 

Course by ACloudGuru **AWS Certified Solution Architect - Associate** 

Course by ACloudGuru **AWS Certified Developer - Associate** 

MOOC By

**Big Data Specialisation** 

UC San Diego

• 5 Courses including a capstone project

Pluralsight course Applying the Lambda Architecture with Spark, Kafka, and Cassandra

Udemy course By Python for Data Science and Machine Learning Bootcamp Jose Portilla

man7.org

Linux / UNIX system programming

Amadeus internal Secure Software Development with C++

training

Technical Skills

**Dev. Philosophy:** OOP, OOAD, Design patters and principles

Languages: Python, Scala, JavaScript, C++, SQL

Big Data Tools: Hortonworks Data Platform, Apache Hadoop, Apache Spark, Kafka, Hive,

Ansible

Cloud Tech. OpenStack, AWS

Data analysis lib: Numpy, Pandas, Matplotlib, Seaborn

Database: SQL Server, MySql, SQLite, Cassandra, DynamoDB

### Curriculum vitae

C++ Libraries: C++14, Boost, Qt

Build tools: Make, CMake, Maven

Source Control: Git, SVN

Agile & PM tools: Scrum, Confluence

IDE: IntelliJ, Eclipse, Qt Creator, Netbeans, Zeppelin, Jupyter Notebook

### Project Works

**MSc Thesis** Title: Improving usage control with intra-process data-flow tracking.

**Description:** Using runtime binary analysis and data flow analysis, I built a tool which tracks the flow of the data, once a software gets access to important and sensitive user information. The tool also informs the user if a certain

sensitive information is used in an unintended way.

Technologies: C++, Thrift, Binary analysis tool (Pin), Data flow analysis tool

(Libdft)

### **Language Proficiency**

English (Fluent)
German (Beginner)