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| **Asish Biswas** Email: asish012@gmail.com Mobile: +49 176 43274219 Jagdfeldring 66  85540 Haar, Germany | |
|  | **Overview** |
|  | I’m a software engineer who loves to tackle challenging problems with creativity and knowledge of new technologies. I’m Experienced with software development in C++ and python for distributed systems, mobile devices, and high-performance systems. I’m also very much passionate about cloud computing and machine learning. |
|  | **Experience** |
| January 2019 -  Continuing | **Data Engineer at BMW AG**  **Responsibilities:**   * Building a data asset environment for Software Pipeline Analytics project by bringing together scattered structured and unstructured data. * Designing, building and maintaining our on-premise big-data cloud environment with Hortonworks Data Platform (HDP). * Writing ETL jobs on HDP to handle unstructured data.   **Technologies:** Python, Apache Hadoop, Spark, Hive, Ansible |
| September 2016 - December 2018 | **Software Engineer at BMW Car IT**  **Responsibilities:**   * Designing and developing “intelligent personal voice assistant” middleware component for BMW head-unit to enable voice control for navigation, entertainment, and other functionalities. * Writing communication wrapper for several middleware modules to enable communication between 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 - August 2016 | **Software Engineer at Amadeus IT**  **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 - March 2014 | **Work Student at Siemens AG**  **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:** Objective-C, Raspberry-Pi, C++, Libelium sensors. |
| June 2012 - September 2013 | **Research Assistant (HiWi) at Fortiss GmbH**  **Responsibilities:**   * Developing self-balancing “Smart Office” with different sensors and actuators including power storage devices.   **Technologies:** Linux, Java, GWT, MySql |
| September 2010 - February 2012 | **Software Engineer at Samsung Bangladesh R&D Center Ltd.**  **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** |
| By: [man7.org](http://man7.org) | **Linux / UNIX system programming** |
| Amadeus internal | **Secure Software Development with C++** |
| Python Academy | **Advanced python training** |
| MOOC By  University of Washington | **Machine Learning Specialisation**   * 4 Courses including several projects |
|  | **Technical Skills** |
| **Dev. Philosophy:** | OOP, OOAD, Design patters and principles |
| **Languages:** | C++, Python, Scala, JavaScript, SQL |
| **C++ Libraries:** | STL, Boost, Qt |
| **Big Data Tools:** | Apache Spark, Apache Kafka, HDFS, Cassandra |
| **Data analysis lib:** | Pandas, Matplotlib, Seaborn |
| **Database:** | SQL Server, MySql, SQLite, Cassandra |
| **Cloud Tech.** | AWS Certified Solution Architect - Associate (Course Completed) |
| **Build tools:** | Make, CMake, Maven |
| **Source Control:** | Git, SVN |
| **Agile & PM tools:** | Scrum, Confluence |
| **IDE:** | IntelliJ, Eclipse, Qt Creator, Netbeans, Zeppelin, Jupyter Notebook |
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|  | **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) |