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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 challenges with creativity and knowledge. I’m experienced with secure software development in C++ and python for distributed systems, mobile devices, and high-performance systems. I’m also very passionate about cloud computing and big-data technologies. | |
| **Experience** | |
| January 2019 -  Continuing | **Data Engineer and Cloud Architect at BMW AG**  **Responsibilities:**   * Design and build a unified data asset 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, Ansible, Hadoop, Spark, Hive |
| September 2016 - December 2018 | **Software Engineer at BMW Car IT**  **Responsibilities:**   * Design and develop “intelligent personal voice assistant” middleware component for BMW head-unit to enable voice control for navigation, entertainment, and other functionalities. * Write communication wrapper for 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:**   * Develop message switching middleware application to ensure guaranteed message delivery of a distributed system. * Build, release and maintain the messaging service on Amadeus datacenter.   **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.   **Technologies:** iOS, 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  **Specialization:** Software Engineering |
| October 2009 | **Bachelor of Science in Computer Science and Engineering**  Ahsanullah University of Science and Technology, Dhaka, Bangladesh  **Specialization:** Software Engineering |
| **Technical Skills** | |
| **Dev. Style:** | OOP, OOAD, Design patters and principles, CI-CD |
| **Languages:** | C++, Python, Scala, SQL |
| **C++ Libraries:** | C++14, Boost, Qt |
| **Database:** | SQL Server, MySql, SQLite, Cassandra, DynamoDB, MongoDB |
| **Big Data Tools:** | Apache Spark, Kafka, Ansible |
| **Cloud Tech.** | AWS, OpenStack |
| **Data analysis:** | Numpy, Pandas, Matplotlib, Seaborn |
| **Build tools:** | Make, CMake, Maven |
| **Source Control:** | Git, SVN |
| **PM tools:** | Scrum, Confluence |
| **Training and Certification** | |
| * **Linux / UNIX system programming** man7.org * **Secure Software Development with C++** Amadeus Training * **AWS Certified Big Data – Specialty** Course by Linux Academy * **Advanced python training** Python academy * **Machine Learning Specialization** (4 Courses including several projects) Coursera - University of Washington | |
| **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) | |