July 2020 - Continued

Feb 2020 - Continued

Sep 2019 - Nov 2019

Feb 2018 - Feb 2019

May 2016 - Aug 2018

Jul 2014 - Mar 2019

# EDUCATION

MS	Masters in Computer Science Universität Rostock, Rostock, Germany	2019 – Present
BS	Bachelors in Computer Science Bahria University, Karachi, Pakistan	2014 – 2018
MPP	Microsoft Professional Program – Front End Development $Microsoft - EdX$	2017 - 2018
DAFM	Diploma in Advertising & Film Making  ARENA Multimedia	2016 - 2017

#### WORK EXPERIENCE

#### Research Assistant, Max Planck Institute - DEMOGR

Data collection and Information retrieval for various federally funded demographic research projects.

#### Research Assistant, Fraunhofer IGD

- Development of variety of UI modules for in-house machine learning projects.
- Developed ways for efficient calibration testing, image improvement and other features.
- Testing UI with Mocha and Selenium Web Driver.

#### Werkstudent Machine Learning Engineer, <u>HHLA – HPC</u>

Developed pre-processing libraries for large unstructured data directly shipped from the terminal.

 Analysis of million data records, developed ML models and predicted the dwell times to increase the target of increasing container capacity in HHLA CTB.

#### React Native Developer, <u>CryptoZilla.io</u>

Developed centralized and joint API system for the mobile application.

- Researched and developed tools to formulate data acquisition from more than 190 cryptocurrency exchanges.
- Devised various complex but optimized algorithms for computation and logic.

#### Front End Engineer, MedB Diagnostics

 Implemented various E-commerce modules and features including Shipping, payment, front and back office modules.

- Developed modern UI from scratch and optimized landing pages for mobile and search engines.
- Planned workflows, scenario analysis and code review of several in-house projects.

#### Co-Founder, Axisport Remote Lab

• Served 200+ clients personally with variety of design and development services.

- Build next-generation web and mobile applications with a focus on the client (front-end) side.
- Oversaw client meetings, remote team hiring and development.

## THE BIG 3 PROJECTS

## Real Time Hand Detection in a Therapeutic Research Scenario utilizing Transfer learning

 Data coll., research and creating ML models to solve the problem of detecting hands on multiple directed scenario videos involving therapeutic activities, diff. light conditions and varied backgrounds.

## Real Time Object Detection & Prediction using Machine Learning

Build next generation RTS rare coin detector utilizing ML features to detect, train and optimize scanner algorithm.

# <u>Cryptocurrency Trading Mobile Application (React Native)</u>

Develop all-in-one crypto management tool supporting 4 crypto wallets, 190 exchanges and tens of other features.

#### Machine Learning, Data Analysis & Computer Vision Frameworks

Computer Vision, CUDA, Data mining, MATLAB, R, Neural networks, Deep learning, Natural Language processing, Information Retrieval, C++, OpenCV, Python, TensorFlow, Keras, Pandas, NumPy, SQL, Seaborn, Matplotlib, Jupyter Notebooks, Clarifai, MS Office, MS Excel, Google Analytics

# Web / Mobile Application Frameworks

Java, Spring boot, Docker, Maven, HTML5, CSS3, Javascript ES5/6, React, Vue.js, Node.js, React Native, Android, Angular JS, Bootstrap, JSON, XML, SQL, jQuery, PHP, Jenkins, Progressive Web Applications, Automated Testing, Rest APIs, SOAP, Selenium, Mocha, Cross Browser Testing, Compatibility and Accessibility, Performance Optimization, Linux, BEM, LESS and SASS

# Cloud / Backend

MySQL, NoSQL, GraphQL, MongoDB, AWS, Google Cloud Engine, Firebase

### **Others**

Adobe Suite (3 years exp): Adobe Photoshop, Adobe Illustrator, Adobe XD, CorelDraw, Premiere Pro, InDesign, After Affects, UI design, Advertisement design, Branding, Video editing, Storyboarding, User experience, SEO, Content writing (3 years) etc.

#### **PUBLICATIONS**

- Research Report: Situation Aware Assistance, private/unlisted, May 2019
- Research Report: Augmented Reality in Altered Gravity, private/unlisted, April 2019

#### **INTERESTS**

- Passionate about machine learning part. deep learning.
- Occasional personal blogging.
- In love with MOOCs.