

ABRAR AHMED

+4917642030519 / abraracs@gmail.com / Berlin, Germany / [Github](#) / [Linkedin](#) / [Xing](#)

WORK EXPERIENCE

- Master Thesis** — Fraunhofer-Institut für Graphische Datenverarbeitung Feb 2021 – Jul 2021
- Devised an open-source SSD line detection algorithm from scratch.
 - The algorithm is capable of detecting lines with an accuracy of **93%** on general datasets.
- Research Assistant (Front-End Engineer)** — Fraunhofer-Institut für Graphische Datenverarbeitung Feb 2020 – Feb 2021
- Built the interface and **APIs** for the TensorRT inference engine from scratch using **Vue.js**.
 - Built the **UI** and APIs for the TensorRT inference engine from scratch using Vue.js.
 - Contribution to the design of the IGD proprietary VISION client system architecture.
 - Modeled feature visualization techniques to trace features learned in **14** bat species.
- Research Assistant (Data Engineer)** — Max Planck Institute for Demographic Research Jul 2020 – Mar 2021
- Handling of large-scale datasets specifically dealing with **data quality**.
 - Data cleaning, management, and implementation of cross-validation techniques.
 - Statistical analysis and support in the preparation of **visualizations and reports**.
- Werkstudent Software Engineer** — Hamburg Port Consulting Sep 2019 – Nov 2019
- Automated the **data pre-processing** pipeline reducing the time consumption by **98.3%**.
 - Derived the optimal container dwell time prediction by implementing **time-series analysis** and **forecasting** of the container data with an accuracy of 98%.
 - In-house application development with **Java** and **Jenkins** for **CI/CD**.
- Freelance Software Engineer** Jun 2014 – Mar 2019
- Completed **200+** small and big projects by myself.
 - Co-founded** 3 micro-startups (Axisport Lab, Graphimator & Stitch-In)
 - Clients: Cryptozilla.io *, Medb diagnostics **, Horizon Tech, Productivenous, Al Wahdat Travels, GiveAKidney, Midwestradar, Chotaay Delivery, UPenn, Flexicom, IFI, Individual entrepreneurs, and many more.
- React Native Developer** — CryptoZilla.io * Feb 2018 – Feb 2019
- Developed a centralized and joint **API system** (5 services) on **Google cloud platform** using Cloud shell.
 - Researched and developed tools to formulate **data acquisition** from more than **190** cryptocurrency exchanges.
 - Devised various complex but optimized algorithms for computation and logic of the architecture using **React Native** and other tools.
- Front End Engineer** — MedB Diagnostics ** May 2016 – Aug 2018
- Implemented various E-commerce modules and features including Shipping, payment, front and back-office modules on **Prestashop**.
 - 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.

EDUCATION

- MS** Masters in Computer Science 2019 – 2021
Universität Rostock, Rostock, Germany
- BS** Bachelors in Computer Science 2014 – 2018
Bahria University, Karachi, Pakistan
- MPP** Microsoft Professional Program – Front End Development 2017 - 2018
Microsoft – EdX

OPEN SOURCE / FUN PROJECTS

3-Step Instant Appointment Scheduler

- A 3-step appointment scheduler built on the MERN stack.

A Form Validator in React Native

- A one-screen nice-looking form built on react native custom validation rules.

Error Reporting Tool in Vue.JS

- A one-page error reporting UI for Vue.js developers and enthusiasts.

A Novel Bezier Line Object Detection Library

- A novel SSD-based line detection algorithm.

Real-Time Hand Detection using neural networks (Single Shot Detector)

- Using neural networks solved the hard problem of tracking hands in real-time using a customized first-person POV hand dataset.

TECHNICAL SKILLS

Web / Mobile Front-End Frameworks

HTML5, CSS3, SCSS, Javascript ES5/6, React, Vue.js, Angular JS, React Native, Android, Bootstrap, Material UI, Tailwind CSS, JSON, XML, SQL, jQuery, API Development, Postman, Responsive and Progressive Web Applications, Docker, Jira, Git, Linux, Axure RP, Balsamiq

Testing Tools and Frameworks

E2E Testing, Component Testing, Cypress, Selenium, Chai/Mocha, Cross Browser Testing, Compatibility and Accessibility, Performance Optimization

Backend / Cloud / CI-CD

Node.js, Express.js SQL, MySQL, NoSQL, GraphQL, MongoDB, AWS, Azure SQL, Google Cloud Engine, Firebase, Jenkins, Circle-CI

Others

Machine Learning, Data Analysis & Computer Vision Frameworks: Python, Deep learning, Classification, Regression, Object Detection, CNN, OpenCV, Neural networks, Scikit-Learn, TensorFlow/Keras, Pandas, NumPy, SQL, Seaborn, Matplotlib, Jupyter Notebooks, Clarifai, MS Office, MS Excel, Google Analytics

UI / UX: Adobe Photoshop, Adobe Illustrator, Adobe XD, CorelDraw, Premiere Pro, InDesign, After Effects, UI design, Advertisement Design, Branding, Video Editing, Storyboarding