

# Muhammad Ali Anjum

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## SUMMARY

- Senior software engineer with master's in computer science and 4+ years of experience in Node.js.
- Designed and developed RESTful services for projects including Vodafone services, European eID4u, real-time vehicle tracking system, and bio-metric authentication.

## WORK EXPERIENCE

### Spindox S.P.A., Turin, Italy

- Fullstack Developer, Software Division Jan 2021 – Apr 2022
  - Lead the implementation of CI/CD pipeline in the development environment using Jenkins, Bitbucket Webhook and Docker.
  - Designed and developed maintainable RESTful services in Node.js using Express framework.
  - Designed, developed and implemented service monitoring system using Grafana, Prometheus and Swagger-Stats, Prometheus and Loki.

### Awesomebox Technologies, Illinois, United States

- Full Stack Engineer, Freelance Aug 2016 – Dec 2018
  - Designed and developed an IT assistant as a software solution.
  - Developed RESTful web API in Node.js and Windows application in NW.js.
  - Elasticsearch was used for effective and accurate text.

### TeReSol Pvt. Ltd., Islamabad, Pakistan

- Software Design Engineer, Software Division Nov 2015 – Jul 2016
  - Designed, developed and implemented RESTful web service for real-time vehicle tracking system in Node.js using Sails MVC Framework.
  - Developed boilerplate using Node.js, Express, Sails, Backbone and MySQL. Which was used for multiple projects including a project for National Bank of Pakistan.
  - Developed custom solution to handle large amount of incoming requests from trackers.

### Ops Assurance, Coventry, UK

- Software Developer, Freelance Jan 2015 – Oct 2015
  - Cross platform mobile application was developed using Ionic Framework.
  - Back-end was developed in Node.js using Express framework and front-end was developed in AngularJS with MVC design pattern.

## EDUCATION

### Politecnico Di Torino, Turin, Italy

- Master's in Computer Engineering (Data Science) Oct 2017 – Dec 2019
  - Studies focused on System Architecture, Data Science and Computer Security.
  - Related Courses: Computer System Security, Big Data, Machine Learning and Artificial Intelligence, Computer Architecture, Computer Networks, Distributed Programming, System and Device Programming
  - Grade: 101 / 110

### School of Electrical Engineering and Computer Science, NUST, Islamabad, Pakistan

- Bachelor's in Software Engineering Sep 2011 – Jun 2015
  - Studies focused on software design and development with distributed computing as major.
  - Related Courses: Distributed Systems, Operating Systems, Object Oriented Programming, Parallel Computing, Computer Networks, Network Security, Database Systems, Computer Architecture, Software Construction
  - Cumulative GPA: 3.09 / 4.0

## RESEARCH EXPERIENCE

### TORSEC: Computer and Network Security Group, DAUIN, Politecnico di Torino, Italy

- Research Assistant, Computer Security Mar 2019 – Dec 2019
  - Project: Design and development of WiFi access with eIDAS for cross border authentication
  - Supervisors: Prof. Antonio Lioty, Ing. Diana Berbecaru
  - Research areas: PKI, digital identity, network security and protection of network.
  - Developed a service provider to authenticate using eIDAS regulation and integrated it in the Politecnico di Torino network.

### Information Processing and Transmission Lab, SEECS, NUST, Islamabad, Pakistan

- Research Assistant, Software Department Aug 2014 – Jun 2015
  - Project: Design and Development of Opportunistic Large Array Networks for Smart Grid Communications
  - Supervisors: Dr. Syed Ali Hassan
  - Virtual platform was developed to control and configure software defined radios.
  - Research areas: Signal processing, Sensor networks, Data analysis.

<b>PROFESSIONAL SKILLS</b>	<b>Expert: (★★★★☆)</b> JavaScript, Node.js, Python, Docker, Git, Mysql, MongoDB, REST <b>Advanced: (★★★★☆)</b> TypeScript, Jenkins, Hadoop, Prometheus, Grafana <b>Familiar: (★★★☆☆)</b> Scala, R, PyTorch, Sails, React, AngularJS, Ionic	
<b>PUBLICATIONS</b>	<b>CONFERENCES</b> [1] M. S. Omar, M. A. Anjum, S. A. Hassan, H. Parveiz, Q. Ni, “Performance Analysis of Hybrid 5G Cellular Networks Exploiting mmWave Capabilities in Suburban Areas,” in <i>IEEE International Conference on Communications (ICC)</i> , Kuala Lumpur Malaysia, May 2016.	
<b>CERTIFICATES</b>	<b>AWS Cloud Practitioner Essentials Day</b> , Amazon Web Services (AWS) May 2021 <b>Agile Foundations</b> , LinkedIn Jan 2021 <b>Microservices Foundations</b> , LinkedIn Jan 2021 <b>Test Automation Foundations</b> , LinkedIn Jan 2021 <b>Continuous Integration</b> , Coursera Nov 2020 <b>Rest API (Intermediate)</b> , HackerRank Nov 2020 <b>JavaScript (Intermediate)</b> , HackerRank Mar 2021 <b>Python (Basic)</b> , HackerRank Nov 2020 <b>SQL (Intermediate)</b> , HackerRank Jul 2022 <b>Problem Solving (Basic)</b> , HackerRank Nov 2020	
<b>PROJECTS</b>	<b>Pathology Images</b> A GUI application to obtain segmentation of cancer probabilities using deep neural networks. <b>Technologies:</b> PyTorch, Flask, NW.js, Git. <b>TereTrack</b> A Server designed in NodeJS to communicate with a GPS Tracking Device. <b>Technologies:</b> BackboneJS, SailsJS, PM2, nginx, Git, socket.io, REST, MySQL. <b>NADRA Bio-metric Verification for NBP</b> A system designed for bio-metric verification of customers for Account Opening and Pensioners. <b>Technologies:</b> BackboneJS, SailsJS, PM2, nginx, git, SOAP, MySQL. <b>Traverse Pakistan</b> Start up to market Pakistan, engage tourism lovers and build a dedicated social presence of Tourism in Pakistan as a brand. <b>Technologies:</b> Django, MySQL, Apache, Git. <b>Rfusion</b> R-Fusion is a blood donation web portal to bridge gap between donors and patients. <b>Technologies:</b> Nodejs, Express, MongoDB.	
<b>INTERESTS</b>	Programming, Hiking, Travelling.	
<b>AWARDS</b>	<b>Merit Scholarship</b> Jul 2009 Full-tuition scholarship intermediate studies. <b>Traverse Pakistan</b> , Selected for Incubation, LUMS Center for Entrepreneurship Mar 2015 Selected for incubated at the best business school in Pakistan.	
<b>VOLUNTEER WORK</b>	<b>AIESEC</b> , Ithaca, Greece ▪ Filmmaker Aug 2018 – Sep 2019 • Internship as filmmaker in a project called "Experience Meraki" of the NGO Day After and AIESEC in Ithaca, Greece to empower local communities. <b>Revolution Flame</b> , NGO, Islamabad , Pakistan ▪ Back-End Web Developer Sep 2014 – Jan 2015 • Development of blood donation web portal to bridge gap between donors and patients.	

[CV compiled on 2022-07-27]