Contact

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Top Skills

Natural Language Processing (NLP)
Healthcare Information Technology
(HIT)
Healthcare Industry

Languages

English (Full Professional)

Certifications

Professional Data Scientist

Honors-Awards

FICS Finalist

Muhammad Talha Bin Rauf

Chief Innovation Officer at Revive Medical Technologies Inc |
Founder Codexter Labs Pvt Ltd | Innovation Consultant
Islāmābād, Pakistan

Summary

I am dedicated to driving technology towards adaptable and efficient
applications, contributing to global innovation. I envision a future
where technology is more adaptable, efficient, and consumer
friendly. I aim to leave a lasting legacy for future generations.

Experience

Revive Medical Technologies Inc.
2 years

Chief Innovation Officer
November 2024 - Present (9 months)
Florida, United States

I lead the end-to-end innovation process for software-based medical devices
— from concept to deployment. I oversee planning, design, development,
and testing of digital health solutions, ensuring each idea is transformed into
a reliable, user-centered product. My focus is on turning innovative concepts
into impactful medical technologies powered entirely by software — built with
nothing but 1s and 0s.

Head of Software Division
August 2023 - November 2024 (1 year 4 months)
Dover, Delaware, United States

• Develop and optimize embedded software systems for cutting-edge medical
devices.
• Collaborate with cross-functional teams to integrate AI and data science
algorithms into real-time applications.
• Design, implement, and test software solutions that enhance the performance
and accuracy of medical technologies.
• Contribute to the architecture and firmware development of next-gen
healthcare devices.
• Ensure compliance with industry standards and regulatory requirements.

Codexter Labs

Advisory Board | Technical Consultant
April 2024 - Present (1 year 4 months)

As Founding Partner of Codexter Labs, my dedication extends past simply running a successful business and serving our clients. We actively work to create a positive influence on the people and communities around us.

Al-Waase
Founder
January 2023 - Present (2 years 7 months)
Islāmābād, Pakistan

• Develop the strategic vision and mission for Al-Waase, aligning with the brand's commitment to elegance and comfort in home textiles.
• Lead the design, development, and curation of a premium collection of home textile products.
• Build and lead a creative team, fostering a culture of innovation, collaboration, and excellence.
• Establish and execute a business plan, including market research, target audience identification, and brand positioning.
• Oversee product development, sourcing, and quality assurance to ensure the highest standards of craftsmanship.
• Create and manage relationships with suppliers, artisans, and other stakeholders in the textile industry.
• Drive brand awareness and growth through effective marketing and promotional strategies.
• Collaborate with the team to create a strong online and offline presence, engaging with customers through social media and other channels.
• Monitor industry trends and competitors to identify opportunities for differentiation and growth.
• Maintain financial oversight, including budgeting, financial forecasting, and expense management.

N-ovative Health Technologies Pvt Ltd
2 years 11 months

Project Team Lead - Production Task Force
November 2022 - August 2023 (10 months)
Islāmābād, Pakistan

• Develop action plans to mitigate risks in decision making while increasing profitability by leveraging data science.
• Build predictive models using various machine learning tools to enhance the production capacity and fulfilment of annual sales requirements.

• Build predictive models using various machine learning tools to predict the possibility of equipment failure.
• Develop algorithms using NLP for predictive maintenance.
• Design and development of potential solutions and relevant risk assessment.
• Deployment of software and hardware solutions related to maintenance, enhancement, and development.
• Optimization of financial resources and productivity enhancement needs.
• Utilize analytical and technical expertise to provide insights and proposals to support business improvements.
• Active engagement in the quantitative analysis to address business issues.

Process Specialist
November 2021 - August 2023 (1 year 10 months)
Islāmābād, Pakistan

• Managing production of PTCA Balloon Catheter (Class-III Medical Device) Manufacturing under ISO-13485.
• Practical implementation of ISO-13485: Quality Management System of Medical Devices.
• Ethylene Oxide Sterilization using EO KM-01 of biomedical disposable and implantable devices as per ISO 11135-2014.
• Development of Key Performance Indicators (KPI) and presentation to management for execution planning.
• Keeping check on adherence to production practices and SOPs.
• Production Documentation under ISO-13485.
• Plan, implement and coordinate quality procedures for technical and management process as provided by QMS Cell.
• Lead training sessions for newly hired team members and/or for skill development of existing team members.

Officer In-charge
August 2021 - October 2021 (3 months)
Islāmābād, Pakistan

• Technical Lead of all the projects under research and development.
• Responsible for developing electromedical devices.
• Managing approvals from regulatory bodies of Pakistan for Electro-Medical Devices before pilot-scale production.
• Implementation and practice of applicable ISO Standards during development of biomedical projects.
• Embedded System Testing as per applicable QA Standards for Class 2A & Class 2B Medical Devices.

- Embedded Software Testing using various tools (PARASOFT, VectorCast etc.)
- Risk analysis and management, Software and System Requirement Analysis using applicable standards.
- Software Development Life Cycle (SDLC) Documentation.
- Designing of QMS and production SOPs for upcoming products.

Technical Training Officer
May 2021 - July 2021 (3 months)
Pakistan

- Embedded System Testing as per applicable QA Standards for Class 2A & Class 2B Medical Devices.
- Embedded Software Testing using various tools (PARASOFT, VectorCast etc.)
- Embedded System Designer for various electromedical devices.
- Design Engineer of N-Saviour Ventilator System.
- Responsible for software development lifecycle (SDLC).

Design Engineer
October 2020 - April 2021 (7 months)
Islāmābād, Pakistan

- Embedded System Designer for various electromedical devices.
- Design Engineer of N-Saviour Ventilator System.
- Responsible for software development lifecycle (SDLC).

NECOP
Research Intern
July 2018 - August 2018 (2 months)
Islamabad

- Designed and deployed embedded system for Pakistan`s 1st Electronic Voting Machine.
- Designed embedded system for data acquisition and control of automated car dashboard.
- Designed Graphical model for the system using NI LabVIEW and FlowCode.

Interloop Limited
Research Intern
August 2017 - September 2017 (2 months)
Faisalabad

- Learnt and supervised operation of high-furnace oil based (2 x 7.7 MW) Wartsilla Generators and grid-level distribution in the Hosiery Division (HD).

Education

Stanford University

Professional Certification, Artificial Intelligence (Healthcare) · (2024 - 2025)

National University of Sciences and Technology (NUST)

Bachelor of Engineering (B.E.), Electrical Engineering · (2016 - 2020)

Punjab College of Science,Faisalabad

HSSC, Pre-Engineering · (2014 - 2016)

Divisional Model College,Faisalabad

Matriculation · (2012 - 2014)