LinkedIn, Google Scholar aslani.afshin@gmail.com

With over 15 years of progressive experience in data analytics and information science in the biomedical and health sector, **leading client engagement** and **managing technical projects** to improve people's lives by promoting high-quality care through focused engagement with medical devices and leveraging digital trends of personal health data.

- Skillful in client management, business and customer discussions, and facilitate accelerated decision making by interpreting scientific findings and providing evidence-based recommendations for best practices or policies.
- o Facilitate multi-disciplinary teams' collaboration between Engineers, Clinicians, Operations, and Regulatory.
- o Experienced in academic research, medical and healthcare systems, and regulatory agencies.
- o Experienced in large-scale and small-scale clinical studies in population health and medical devices
- o Proficient in **delivering complex solutions** for real-world challenges by **translating** it into high-level hypotheses and using analytical models that can be investigated rapidly and provide **actionable insight**.
- Competent in leading data analytics teams with responsibilities for running queries, compiling and manipulating data from separate sources to form unified sets to perform advanced analysis and modeling.
- o Confident in conducting the entire lifecycle of research and evaluation projects and delivering meaningful results.
- o Skillful in **quantitative analytics, advanced statistical methods**, (e.g. multivariate and stratified analysis).
- Expert in descriptive and inferential ad hoc analysis, population-based studies, and surveys.
- o Experienced in analysis of large-scale healthcare and administrative databases including claims.
- o Familiar with cloud computing, machine learning, and artificial intelligence.

TECHNOLOGY TOOLS:

<u>Agile/Scrum</u>, Waterfall, JIRA, Confluence, Alteryx, Power BI, Tableau, Quick-Sight, Qualtrics, EHR/EMR, NLM Google suits, MS-Office, MS-SharePoint, EndNote, Slack, Teams, Zoom, SDLC, <u>Git</u>, Full Stack (MERN), REDCap Data Analytics, Statistical Programming and Modeling in R, SPSS, STATA, JMP, RStudio, Python, SQL, NoSQL

EMPLOYMENT HISTORY

Senior Medical Data Scientist - Project Lead; LAB 126, Amazon, Sunnyvale, CA

5/2020 to Present

I work in the life science team on developing new medical diagnostic devices in compliance with FDA requirements.

- Provide clinical guidance, insights, and direction on products and features for medical devices.
- o Participate in **government regulatory meetings** (i.e. FDA, CDC) and communicate highlights with cross functional team, senior management, and leadership.
- Work with cross functional team (i.e. SW, HW, legal, external counsel, compliance team, administrative, executives) on various aspects of product development.
- Design and planning clinical research studies required for regulatory filings (i.e. usability study and clinical trials).
- o Develop clinical research study protocols, synopses, clinical lab SOPs, and coordinate clinical study reports.
- O Developed **IRB proposal** and obtained approval from a reputable third-party IRB agency.
- o Develop data solutions including data collection tools, analytical plan and automated data analysis reporting.
- Lead negotiation with clinical research organizations (CRO) and managed screening and selection of vendors.
- o Coordinate with suppliers, select and purchase materials required for prototype and clinical testing.
- o Design questionnaires and develop **online surveys** for screening, enrolment, and post-test evaluation.
- o Leading quality control processes in CLIA lab and relationship with California Department of Public Health.
- Managing contracts and schedule for preventive maintenance of clinical lab equipment.

Previously, as part of data engineering team, I led eight data and software engineers to develop a near-real-time dashboard for Amazon diagnostic mega-lab for COVID-19.

- o Proactively engaged with stakeholders to build relationships, define product requirements, and identify risks.
- o Managed the entire cycle of design and production and supported the product until the end of the life.
- Collaborated effectively with cross-functional teams across the company and maintained clear communication with customers and leaders.
- Served as scrum master, managed backlogs, timeline, and resources to ensure on-time high-quality delivery.

The role I played was managing client relationships and leading the engagement, diving deep into data, identifying trends, validating hypotheses, communicating and presenting findings, and providing actionable insights to business customers, senior executives, and clients' vice presidents on a weekly basis.

Notable accomplishments include

- o Received **clients' satisfaction** rating of 7/7 and increased revenue from clients by 50%+ in less than six months.
- Administered agile methodology and served as scrum master for dashboard development and IT projects. Built
 outstanding professional relationships with clients; product owners, subject matter experts, and stakeholders.
 Managed backlogs, resources, and project timelines to ensure on-time high-quality delivery. Troubleshoot issues,
- Engaged proactively with stakeholders to understand their business priorities and to ensure that analytical solutions deliver practical and add significant value to the bottom-line.
- o Provided analytics counselling and **prescriptive modeling** to healthcare payers to achieve Electronic Clinical Quality Measures (eCQM) goals by making informed decisions.
- Led development of multiple dashboards with Power-BI, Tableau, and Alteryx for clients to support strategic, operational, and analytical demands for timely access to insightful information to make business decisions.
- Collaborated effectively with various cross-functional teams across the business and regions to disseminate
 critical information timely and appropriately expand consulting footprint.
- o Directed complex projects aligned with internal leadership (partners), C-level clients, and solution vendors.
- o **Led team** of 10, data scientists, software engineers, developers, and testing professionals.
- o Trained junior consultants on **building data models, predictive, prescriptive analysis**, and validates results.
- Actively involved in hiring, developing, and managing onsite and offshore teams through data project cycles.

Data Scientist; Frontier Laboratories, Champaign, IL

7/2017 to 12/2018

- Wrote a SBIR proposal submitted to an external funding agency that resulted in receiving investments.
- Developed research designs, study protocols, and statistical analysis plans in biomedical informatics.
- Collaborated in design and execution of novel research approaches and new products.
- o Determine relevant clinical validation design feasibility and complexity.

Early Career

Postdoctoral Fellow - Health Services Research (NIH-T32 grant)

Case Western Reserve University, Cleveland, OH

- Calculated cost of care for Urologic diseases by analyzing EHR data of network Hospitals from in-patient admissions, hospital readmissions, and urgent care using R & RStudio.
 - Prepared and submitted IRB proposal.
 - Compared cost of care with state and national average by analyzing **claims data** from Medicare using **SAS**.
 - Analyzed and reported medical cost drivers, existing service performance and clinical program outcomes.
- o Studied the **impact** of the United States Preventive Services Task Force (USPSTF) recommendation against routine prostate cancer screening in Hospitals and **evaluated** changes in medical practice.
 - **Prepared IRB** exemption request, submitted, and obtain the approval.
 - Utilized clinical laboratory data of Prostate-Specific Antigen (PSA) ordered by physicians in University.
- Oversaw **REDCap** application for research data management and provided training for staff.
- o Reviewed and signed off on statistical analysis plan of all protocols and grant proposals for the department.
- o Provided research methodology and biostatistics **courses** to Urology residents and fellows.
- Presented the result in American Urology Association annual meeting and published in Journal of Urology.

Research Scholar; University Medical Center Groningen, Netherlands

- o Family-based genetics epidemiology studies.
 - Multivariate data analysis of "Oman Family Study" on blood pressure and heart rate variability (HRV) and defined genes associated with low HRV in that population using SOLAR and **R**.
 - Completed pedigree analysis & drawing of multi-generation families using a variety of statistical genetic analysis programs including SAEG.
 - Published in Journal of Hypertension as well as Twin Research and Human Genetics.

• **Presented** at GUIDE annual meeting 2010.

Research Scientist; Erasmus University Medical Center, Netherlands

- Multivariate data analysis of large-scale genome wide association studies (GWAS) & candidate gene (SNPs)
 exploratory data analysis using "Rotterdam Study" and CHARGE consortium of NLRP genes on Obesity,
 Metabolic syndrome, Cardiovascular diseases.
 - Large scale data manipulation and data mining with pattern recognition.
 - Permutation using data from the Human Genome Project.
 - Used a variety of statistical analysis such as Regression, Logit (Logistic regression) & Survival analysis.
 - Accepted at American Heart Association meeting.

Faculty of Medical Informatics; Shahid Beheshti University of Medical Sciences, Tehran, Iran

Member of the founding committee for the Medical Informatics program.

- Actively led and enhanced the university's Information Technology committee.
- o Provided Masters and PhD level courses in medical informatics received "Best Teacher" award.

Chief Information Officer; Health System, Tehran University of Medical Sciences (TUMS), Iran

- o Established office of public health informatics.
- Designed and led development of electronic public health system network which connected all urban and rural health centers. The electronic network provided infrastructure for transmitting public health data. It enabled accurate data transfer, accelerated public health reporting, and quick responses to outbreaks.
- o Prepared, submitted, and **awarded grants** for health services research to improve public health reporting using information technology.
- Hired, supervised, and evaluated staff to ensure receiving appropriate training and opportunities for development.

Sport medicine physician; Sport Medicine Federation of Iran

- o Defined and managed research priorities as member of research and education committee
- o Managed publication of scientific journal of sports medicine
- o Managed pre-participation examination of athletes
- o Diagnosed and treated of sports injuries at sports field and clinic
- o Doping control officer
- o Provided mental training and visualization techniques to elite athletes

Primary Care Physician; Health System, TUMS

- o Managed health center and staff
- Diagnosed and treated acute and chronic illnesses.
- o Provide annual checkups, routine health screenings, and age-appropriate immunizations.
- Counsel on lifestyle changes to prevent diseases.
- o Coordinate care with other physicians and specialists as needed.

Medical Intern; TUMS affiliated hospitals

Participated in diagnosis and treatment of patients in departments of Internal medicine, OB/GYN, Pediatrics, Neurology, Surgery, Ophthalmology, Psychiatry, Community medicine, and Infectious disease.

EDUCATION

Doctor of Medicine (M.D.),

Master of Public Health; Epidemiology and Biostatistics

Tehran University of Medical Sciences

Master of Science in Biomedical Engineering; Medical Informatics Management

Poly-Technic University of Tehran (Amir-Kabir University of Technology)

Graduate studies in Bioinformatics, University of Tehran

Graduate Studies in Genetics Epidemiology, Erasmus Medical Center

Full Stack Developer Boot Camp, UC Berkley extension