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Omar K. **Hosney**

CHIEF DATA SCIENTIST · INDIVIDUAL CONTRIBUTOR

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Position: Senior Data Scientist / Individual Contributor

Dear Sirs

About Me

I am Omar Kamal, Chief Data Scientist at Tribal.Credit, where I develop data products, builds data models and mines for insights that optimise business operations.

In my 20+ years of experience in the telecommunications industry, I joined several multinationals including Lucent, HP, IBM and Mentor Graphics. I held different leadership, education and management responsibilities throughout my career; gaining wide experience in multiple fields including Telecommunications, Software Development, Information Technology.

As a lecturer, trainer and consultant in Operation Management and Data Analytics, I trained more than 250 engineers, managers and students.

I am a Black-Belt Six Sigma professional as well as a Certified Quality Manager (CQM) from the American Society of Quality. I hold a master's degree in Business Administration from City University of Seattle, Washington (US), and a Bachelor of Science degree in Electronic and Telecommunication Engineering from Cairo University.

Objectives

I find myself more on the technical side of things. Although I had a very successful career in managing people and creating teams and departments from scratch, I find my comfort zone in addressing the gap between business needs and the technical infrastructure and/or research potentials.

I have been involved in the last 8 years of my professional life in machine learning, statistics, deep learning, market basked analysis, optimization techniques, analytic dashboards, and lately MLops. In that journey, I had high degree of encounter with AWS cloud infrastructure, Github, Gitlab , Docker and Kubernetes.

Refeer to my attached resume for more details.

Sincerely,

Omar K. Hosney

Attached: Curriculum Vitae

Omar Kamal Hosney

+1 (510) 766-8553 | omkamal@gmail.com | San Jose, CA, USA

| **PROFILE** | • Analytical and solution-focused **Senior Data Scientist** with experience in **using complex data and advanced modeling** to solve business challenges across telecommunications, fintech, and IT sectors.
| | • Expertly **direct digital transformation**, strengthen operations, and pursue cost reduction programs in all technology areas for companies like Lucent, HP, IBM, and Mentor Graphics.
| | • Engage in **high-impact partnerships** for policy execution, accelerate performance through capability building, and help the organization gain speed by integrating IT with best practices.
| | • Excellent at creating scalable solutions across platforms, **advising on technology decisions** for shaping the next-generation products, and **optimizing value** amid technological disruption in an **agile environment**.
| | • Progressively scaled an outstanding career path and moved into **leadership positions**, making bold decisions for positive social impacts while mentoring the talent to meet the organization's vision, mission, and goals. |

| **CERTIFICATION** | • **Software and IT Six Sigma Black Belt**, Systonomy, 2012|Credential ID SYST-SECC BB 304
| | • **Certified Quality Manager**, American Society for Quality, 2002|Credential ID 6983 |

| **SKILLS** | Machine and Statistical Learning| Natural Language Processing| Time Series Forecasting Analysis Models Development| Ensemble Methods Implementation| KPI Measurement Build Data Models| Operation Management and Data Analytics| Quality Assurance Continuous Improvement| Resource Optimization | Software Testing Best Practices Training and Development| Requirements Analysis |

| **CORE DOMAIN EXPERTISE** | **Statistical Techniques and Analysis**
| | • Improved efficiency and measured performance using **statistical techniques** like hypothesis testing, analysis of variance, statistical process control, and design of experiments (DOE).
| | • Performed **market basket analysis** using Apriori and FPGrowth algorithms.
| | • Rolled out various network analyses using R Igraph and Python networkX libraries to determine communities and developed graph analysis for many business proposals.
| | |
| | **Machine Learning and Algorithms**
| | • Devised **machine learning modules** utilizing platforms such as Tensor flow, SciKit-learn, R Caret, Pycaret, XGBoost, and Lightbgm.
| | • Conducted clustering on the basis of **algorithms** like Kmeans, Kmeans++, DBscan, Spectral Clustering, and Hierarchical Clustering.
| | • Used **supervised machine learning** like linear regression and its variants (polynomial, lasso, ridge, elastic nets), logistics regression, support vector machine, decision tree, recursive partitioning, random forest, boosting algorithms, including Adaboost, XGBoost, Light GBM, and Catboot to forecast outcomes correctly.
| | • Utilized **model stacking** to combine predictions from various efficient machine learning systems.
| | • Architected **comprehensive learning models** using Tensor Flow 2.0, devised multilayer models, and facilitated regulations, including L1, L2, and dropout rates.
| | • Managed **fine-tuning machine and deep learning models** with the assistance of hyperparamter optimization techniques (random grid search, and hyperopt bayesian optimization). |

- Developed models using LSTM to monitor **time series forecasting** and handled research on NLP in relation to 1D-CNN results.
- Experienced in utilizing **optimization techniques** such as linear programming (simplex algorithms, integer programming, and genetic algorithms) for issue resolution.
- Expertise in utilizing tools and infrastructure, including git, SAS Jmp, quality function deployment, Quantum XL and AWS cloud web services like DynamoDB, RDS, Elastic cache, Lambda, SQS, S3, and SNS.

Dashboards and Visualization
- Involved in creating visualization graphs using several R packages like GGplot, Lattice and Python libraries like Matplotlib, Seaborn, Plotly, and Dash.
- Formulated visualization dashboards with the aid of Streamlit, Elastic search Kibana, Tableau, and Looker.

Problem Solving
- Leveraged CNN convolutional neural networks to resolve problems not related to image and also those with hierarchical nature.
- Negated natural language processing issues based on libraries like NLTK, Spacy, and Gensim.

CAREER PROGRESSION

Chief Data Scientist, Founding Team, Tribal Credit, California, USA,
October 2015 - Present

Chief Data Scientist, TA Telecom, Cairo, Egypt,
November 2014 - October 2015

Design to Silicon Senior QA Manager, Mentor Graphics, Cairo, Egypt,
February 2007 - November 2014

Software Validation Leader, IBM, Cairo, Egypt,
2005 - 2006

Software Testing Team Lead, Quicktel, Cairo, Egypt,
June 2003 - September 2005

Software Engineer and Quality Deployment Engineer, Lucent
Technologies Software Centre, Egypt, 2000 – 2002

Business Developer, Yalla Inc., Cairo, Egypt,
October 1999 - April 2000

Assistant Engineer, ETISALAT, Abu Dhabi, UAE,
1997 - 1999

Data Networks Engineer and IT Support, Information and Decision Support
Center, Cairo, Egypt, 1996 - 1997

TECHNICAL EXPERTISE	• **Machine Learning Libraries Frameworks**: Tensor Flow, SciKit Learn, Caret • **Programming:** Python, R, SQL, Go, Shell • **Tools/Platforms:** Git, VS Code, Jupyter, R Studio Django, DynamoDB Redis, Elastic Search

EDUCATION	• **MBA,** School of Business, City University of Seattle, 2001 • **Networks Diploma - Software Programming and Computer,** Information Technology Institute, Egypt, 1997 • **Bachelor of Telecommunications and Electronics Engineering,** Cairo University, 1996

CAREER	**Tribal Credit, California, USA** **October 2015 - Present** **Chief Data Scientist, Founding Team** Mentor the data science team to apply advanced analytics and promote a data-driven culture. Match startups to VC funding using algorithms and create a ranking system to forecast the capability to secure funds in the future. Facilitate digital transformation by transitioning to the cloud over AWS and applying machine learning to generate value and improve process efficiency. **TA Telecom, Cairo, Egypt** **November 2014 - October 2015** **Chief Data Scientist** Maximized business impact through data-enabled decision making and devised statistical and data mining systems to gain insights into the business and customer profiles. Identified patterns and useful information from large data sets using data mining techniques. Designed data science models based on data set selection and generated revenue by determining opportunities through marketing analytics. **Mentor Graphics, Cairo, Egypt** **February 2007 - November 2014** **Design to Silicon Senior QA Manager** Managed software engineers to establish an offshore software testing function, focusing on sustaining business operations and technical excellence. Carried out all appraisal, skill development, communication, and quality management. **IBM, Cairo, Egypt** **2005 - 2006** **Software Validation Leader** Collaborated for the project "embedded automotive system" to ensure effective navigation and the ability to sense dead zone with emphasis on safety and comfort. Qualified new SW engineers and described verification processes through internal collaboration **Quicktel, Cairo, Egypt** **June 2003 - September 2005** **Software Testing Team Lead** Involved in building and troubleshooting issues with a class 5 switch. Used C++ to rollout several telecommunication protocols and managed coding, debugging, and integration utilizing C and Perl. Devised unit test framework based on Control Flow Graphs (CFGs) and Finite State Machines (FSM) testing techniques, as well as established a test execution and reporting infrastructure with the assistance of ASML (Abstract State Machine Language), CPPUnit, and NUnit.

	Lucent Technologies Software Centre, Cairo, Egypt	2000 - 2002
	Software Engineer and Quality Deployment Engineer	
	Performed high and low-level designs with the aid of object-oriented methodologies developed with unified modeling language (UML).	

OTHER WORK EXPERIENCE	**Business Developer**, Yalla Inc., Cairo, Egypt, Oct 1999 - Apr 2000 **Assistant Engineer**, ETISALAT, Abu Dhabi, UAE, 1997 - 1999 **Data Networks Engineer and IT Support**, Information and Decision Support Center, Cairo, Egypt, 1996 - 1997

PATENT	- Apparatus and method for predicting future incremental revenue and churn from a recurring revenue product - US 20160189178 A1, Filed Apr 29, 2015US US 20160189178 A1, Filed Apr 29, 2015

REFERENCES	**Hisham Diab**, QA Team Lead at Siemens EDA (Siemens Digital Industries Software), john.doe@email.com, +19712587428 **Roberto Tobia**, Senior Software Development Engineer at Siemens EDA, jane.doe@email.com, +15039970733