3101A, Building 3, Khalifa University - SAN Campus, Abu Dhabi, United Arab Emirates

**SUMMARY** 

**EDUCATION** 

Research oriented Petroleum Engineer with 5 years of proficiency in Data Analytics,

Reservoir/Production Optimization, Produced Water Management & Unconventional Resources.

Team player with excellent communication skills, multiple technical publications/awards and a history of working effectively in fast-paced challenging environments while meeting deadlines. Strong creative and analytical skills, with a result oriented nature and proven leadership capabilities at undergraduate, graduate and corporate levels.

June 2018 Masters of Science in Petroleum Engineering Khalifa University of Science and Technology, U.A.E. CGPA 3.75/4.00

(Former Petroleum Institute)

Bachelor's in **Petroleum Engineering** August 2014 University of Pune, India CGPA 3.75/4.00

**PROFESSIONAL EXPERIENCE** 

**Research Associate** 

Aug 18 - Current

Phone: +971-56-3071201

Email: abhisuboyin@gmail.com

Khalifa University of Science and Technology, Abu Dhabi, U.A.E.

"""Evaluating potential of enhanced oil recovery & identify key uncertainties for sustainable strategies in Abu Dhabi Reservoirs along with water management strategies. [ŒÞ⊅ÛÂÜ^∙^æ&@Ű;[₺&₫

- Primary responsibilities included numerical modelling, academic research, data analysis (fluid & core), experimental coreflooding, technical evaluation/analysis and project correspondence.
- Construct and run models on coreflooding simulators (CYDAR, Sendra) along with upscaling to field/reservoir scale investigations on recovery using Petrel & CMG.
- Multiple academic publications in reputed technical conferences such as ELKIN 2019 @ M.I.T, SPE ATCE, SPE ADIPEC and RDPetro 2018.

### Research Assistant/Teaching Assistant Khalifa University of Science and Technology, Abu Dhabi, U.A.E.

Sep 16 – July 18

- Conducted dynamic simulation assessment of fracture propagation in shale gas reservoirs along with conducting fit-for-purpose sensitivity analysis to improve economic recovery of hydrocarbons.
- Primary responsibilities included assisting with academic research, conducting literature reviews, data analysis and research work.
- Able to proficiently work on industrial simulators such as **Petrel**, **CMG & Petroleum Experts**.
- Other responsibilities include preparation and composition of manuscripts for academic conferences/journals, project correspondence and supervision of undergraduate courses.

## **Petroleum Engineer** Praesagus RTPO (A Sierra-Hamilton Company), Pune, India

Sep 14 – May 16

- Conducted integrated in-house studies to optimize field development and production optimization schemes to support achievement of field development objectives.
- Responsibilities included identification of problematic wells and provide recommendations to mitigate risks while being compliant with policies, procedures & regulations.
- Able to proficiently work on industrial simulators such as GAP by Petroleum Experts.
- Other responsibilities include software testing, post data validation, documentation and analysis of an upcoming industrial tool which is currently in beta.

# **Advanced Logging Tools and Log Interpretation** Baker Hughes©, Mumbai, India

Feb 14 - June 14

- Involved in extensive planning and scheduling work for the real time completion of a field project.
- ...... Worked with an international team on consulting projects involving MWD/LWD and Petrophysics to identify and share technical standards, best practices and lessons learned
- ....... Included using application software to perform in-depth analyses of scenarios.
- A case study involving log interpretation and failure analysis was undertaken to emphasize the importance for safe work practices and procedures at all times.

**Data Analyst** Nov 13 – Nov 13

# Praesagus RTPO (A Sierra-Hamilton Company), Pune, India

- Responsibilities included shortlisting of ideal well candidates for a given production criteria.
- Identified data acquisition requirements of over 300 candidate wells and data interpretation.

**PROFESSIONAL EXPERIENCE** 

Intern

Jun 13 - Jul 13

Falcon Oil & Gas Services and Supplies, Sharjah, U.A.E.

- Internship under the Shipping, Sales and Procurement section.
- Assisted operations and provided technical support to sales team.
- Included using client based application software to simulate scenarios.
- Involved the use of petroleum engineering concepts to solve client problems. Along with the promotion of company services, assisted in technical evaluation.
- Active participation in ongoing sales initiatives and reviews.

**COURSES** Advanced Reservoir Engineering

**Production Engineering** Advanced Drilling Engineering Well Testing Reservoir Simulation **Drilling Operations** Formation Evaluation Well Engineering Design Petroleum Economics Carbon Management

**COMPUTER SKILLS** 

Industrial Software: Petrel, Saphire, CMG, MATLAB, IPM Suite, CYDAR, Sendra, HYSYS, AutoCAD, Unity, MS Office, Adobe Photoshop, Adobe Illustrator, Adobe

InDesign, Adobe After Effects, CorelDraw, Sketchup, Irazu

Programming Languages: C++, Python, R

Operating Systems: Windows, Mac, Ubuntu & Linux

**TECHNICAL ACHIEVEMENTS**  SPE Abu Dhabi Young Professional Paper Contest 2019 Winner - Third Place

World Finalists for EAGE FIELD CHALLENGE 2013 held in London

Secured 1st Position in Model Making Competition 2013 and 3rd Position in Model Making

Competition Held under AIIIP 2012.

Darcy Oil Field Business Challenge 2014 and 2013 (Sponsored by Shell) which involved

technical and economic development of an oil field

Secured 3rd Position in Technical Case Study 2013 (Organized by Cairn India).

**ACADEMIC PROJECTS** 

**HONORS** 

Fracture Propagation in the Presence of Natural Fractures in a Shale Gas Reservoirs

Advanced Logging Tools and Log Interpretation (Under BakerHughes©)

Assessment of Economic Reforms in Petroleum Sensitive Countries in Reaction to

Fluctuating Oil Prices

Enhanced Simulation of Multiple Hydraulic Fractures in Horizontal Wells Hydrajetting:

A Complete Analysis

Petroleum Economics: Data Analytics, Data Science & Neural Networks

Well Testing: Best Practices

**ADDITIONAL DETAILS** 

Permanent Address : Puthumana House, Edvanakad P.O., Ernakulam District,

Cochin - 682502. Kerala, India

: English, Hindi, Malayalam, (Read, Write & Speak - Fluently) Languages known

Arabic (Read & Write), Tamil (Speak)

Member: Society of Petroleum Engineers (SPE), GiveIndia and Joy of Giving, Flood Relief charities

**REFERENCES** 

Dr. Mohammed Motiur Rahman

Associate Professor and Associate Chair. Khalifa University of Science and Technology

Email: md.rahman@ku.ac.ae Office: +971-2-3123430

Mr. Ashish Chitale

President and Managing Director. Praesagus RTPO (A Hamilton Company) Email: achitale@hamiltongroup.org

Office: +91-20-25650098

#### **Publications**

### • Journal Proceedings [Peer-Reviewed]

- a. Hydraulic Fracturing Design Considerations and Optimal Usage of Water Resources for Middle Eastern Tight
  Gas Reservoirs
  - Suboyin, A., Rahman, M. M., & Haroun, M. (2021). Hydraulic Fracturing Design Considerations and Optimal Usage of Water Resources for Middle Eastern Tight Gas Reservoirs. ACS Omega.
- b. <u>Hydraulic Fracture Propagation and Analysis in Heterogeneous Middle Eastern Tight Gas Reservoirs:</u> Influence of Natural Fractures and Well Placement
  - Al Mteiri, S., Suboyin, A., Rahman, M. M., & Haroun, M. (2020). Hydraulic Fracture Propagation and Analysis in Heterogeneous Middle Eastern Tight Gas Reservoirs: Influence of Natural Fractures and Well Placement. ACS Omega.
- c. <u>Hydraulic fracturing design considerations, water management challenges and insights for Middle Eastern</u> shale gas reservoirs
  - Suboyin, A., Rahman, M. M., & Haroun, M., 2020. Hydraulic fracturing design considerations, water management challenges and insights for Middle Eastern shale gas reservoirs. Energy Reports, 6, 745-760.
- d. Integrated management of water resources: A novel approach for water-stressed regions
  - Haroun, M., Punjabi, S., Suboyin, A., Anastasiou, S. and de Bakker, J., 2019. Integrated management of water resources: A novel approach for water-stressed regions. Systems Research and Behavioral Science, 36(6), pp.827-834.
- e. Unconventional and conventional oil production impacts on oil price: Lessons learnt with glance to the future
  - Ali, S.A., Suboyin, A. and Haj, H.B., 2018. Unconventional and conventional oil production impacts on oil price: Lessons learnt with glance to the future. J Glob Econ, 6(286), p.2.
- f. Unconventional gas production from hydraulically fractured well-an application of direct search based optimization algorithm
  - Rahman, M.M., Suboyin, A., Haroun, M. Unconventional gas production from hydraulically fractured well-an application of direct search based optimization algorithm (2019) International Journal of Recent Technology and Engineering, 8 (2 Special Issue 11), pp. 2726-2737.

### • Conference Proceedings

- a. Novel Nano and Bio-based Surfactant Formulation for Hybrid Enhanced Oil Recovery Technologies [upcoming and awaiting doi]
  - 2021, September. In SPE Annual Technical Conference and Exhibition. Society of Petroleum Engineers
- b. Assessment of petroleum sensitive countries economic reforms in reaction to fluctuating oil prices
  - Belhaj, H.A., Suboyin, A. and Ali, S.A., 2018, September. Assessment of Petroleum Sensitive Countries Economic Reforms in Reaction to Fluctuating Oil Prices. In SPE Annual Technical Conference and Exhibition. Society of Petroleum Engineers.
- A novel dynamic assessment of multi-stage hydraulic fracture propagation in presence of natural fractures in shale gas reservoirs
  - Suboyin, A., Rahman, M.M., Haroun, M. and Shaik, A.R., 2018, November. A novel dynamic assessment of multi-stage hydraulic fracture propagation in presence of natural fractures in shale gas reservoirs. In Abu Dhabi International Petroleum Exhibition & Conference. Society of Petroleum Engineers.
- d. Fracture propagation in shale gas reservoirs: An enhanced dynamic simulation assessment
  - Suboyin, A., Shaik, A.R., Rahman, M.M. and Haroun, M., 2018, June. Fracture propagation in shale gas reservoirs: An enhanced dynamic simulation assessment. In RDPETRO 2018: Research and Development Petroleum Conference and Exhibition, Abu Dhabi, UAE, 9-10 May 2018 (pp. 103-106). American Association of Petroleum Geologists, Society of Exploration Geophysicists, European Association of Geoscientists and Engineers, and Society of Petroleum Engineers.
- e. Integrated Management of Water Resources A Framework for MENA Region
  - Haroun, M., Punjabi, S., Suboyin, A., Anastasiou, S. and de Bakker, J., 2019, April. Integrated Management of Water Resources-A Framework for MENA Region. In 2019 fourth World Conference on Complex Systems (WCCS) (pp. 1-5). IEEE.
- f. Quantitative Characterization, Design Considerations and Sustainable Resource Management for Middle Eastern Tight Gas Reservoirs
  - Suboyin, A., Motiur Rahman, M., & Haroun, M. (2020, August). Quantitative Characterization, Design Considerations and Sustainable Resource Management for Middle Eastern Tight Gas Reservoirs. In International Conference on Offshore Mechanics and Arctic Engineering (Vol. 84430, p. V011T11A016). American Society of Mechanical Engineers.

### **Additional Responsibilities Include:**

- Design, implement and investigate new and existing research tools, techniques and strategies to enhance the quality and efficiency current research process, and make recommendations for novel initiatives.
- Analysis of global/regional strategies and development issues, with particular knowledge of technological trends and their impacts on society.
- Proficient data and policy analysis skills with experience with both quantitative and qualitative research methodologies (experimental and simulation); ability resolve complex and unfamiliar problems in a timely manner.
- Direct the conceptualizing, definition, design and execution of research projects and provides technical support (internal and external) services related to energy research, strategies and management.
- Evaluate proposals and activities related to energy. This includes proposed new research initiatives, expansion and modifications, remodeling and new equipment purchase, and conducts necessary budgetary reviews and reviews to optimize overall process.
- Provide recommendations on practical means of optimizing energy efficiency and minimizing Green House Gas (GHG) emissions of new projects and existing research strategies.
- Maintain and adhere to the organization specifications, standards and procedures, related to energy research, engineering and technology; to ensure consistency in engineering approaches, avoid diversity in technical requirements and improve cost effectiveness and ensures adherence of the projects with the prescribed standards.
- Identify improvements in internal processes against best practices in pursuit of greater efficiency in line with ISO standards in order to define intelligent solutions for issues confronting the function.
- Comply with relevant HSE policies, procedures & controls and applicable legislation and sustainability guidelines in line with international standards, best practices and company Code of Practices.
- Maintain and operate lab equipment in proper condition for performing research experiments.
- Report to the research leader; assist in writing of scientific and review papers, including preparation of figures, patents and grant applications, and other duties as required.
- Provide research support toward identifying academic and other events, nationally, regionally and globally, of potential interest for the project.
- Strong written and verbal communication skills, including demonstrated ability to translate complex research and analysis into clear and jargon-free prose highlighting key findings and analysis
- Strong interpersonal skills to create easy working relationships with clients, partners and the internal team
- Proven ability to motivate and lead project teams and meet deadlines under pressure.
- Build and maintain effective reporting solutions and ensure updates are available to executive leadership where necessary
- Work closely with heads of various functions to ensure that strategic and research implementation activities are executed to the highest standard by providing relevant guidance and support
- Liaise with Management, IT, HSE, Facilities, Compliance and Performance personnel to streamline requirements and construct the necessary quality control procedures.
- Provide input for preparation of the budgets and assist in the implementation of the approved Budget and work plans to deliver milestones and objectives.
- Investigate and highlight any significant variances to support effective performance and cost control.

# **LICENSES, COURSES AND CERTIFICATIONS**

- 1. Programming for Everybody (Getting Started with Python) Coursera
- 2. Water Resources Management and Policy [University of Geneva] Coursera
- 3. Work Smarter, Not Harder: Time Management for Personal & Professional Productivity Coursera
- 4. Adopting the Habits of Elite Performers LinkedIn
- 5. Being an Effective Team Member LinkedIn
- 6. Blockchain: Beyond the Basics LinkedIn
- 7. Building Resilience LinkedIn
- 8. Building Self-Confidence LinkedIn
- 9. Cert Prep: LEED Green Associate LinkedIn
- 10. Communicating with Emotional Intelligence LinkedIn
- 11. Confronting Bias: Thriving Across Our Differences LinkedIn
- 12. Creativity at Work: A Short Course from Seth Godin LinkedIn
- 13. Critical Thinking and Problem Solving LinkedIn
- 14. Critical Thinking for More Effective Communication LinkedIn
- 15. Data Engineering Foundations LinkedIn
- 16. Decision-Making in High-Stress Situations LinkedIn
- 17. Deep Work: Rules for Focused Success in a Distracted World (Blinkist Summary) LinkedIn
- 18. Delivering an Authentic Elevator Pitch LinkedIn
- 19. Economic Indicators LinkedIn
- 20. Economic Indicators LinkedIn
- 21. Effective Listening LinkedIn
- 22. Embracing Unexpected Change LinkedIn
- 23. Emotional Intelligence as an Inclusivity Booster LinkedIn
- 24. Executing on Innovation: A Process That Scales LinkedIn
- 25. Executive Decision-Making LinkedIn
- 26. Extreme Focus for Effective Performance LinkedIn
- 27. Finding Your Time Management Style LinkedIn
- 28. Giving Your Elevator Pitch LinkedIn
- 29. How Blockchains Will Change Business LinkedIn
- 30. How to Build Rapport Quickly LinkedIn
- 31. How to Create a Perfect Elevator Pitch LinkedIn
- 32. How to Create a Perfect Elevator Pitch LinkedIn
- 33. How to Crush Self-Doubt and Build Self-Confidence LinkedIn
- 34. How to Develop your Career Plan LinkedIn
- 35. How to Develop your Career Plan LinkedIn
- 36. How to Listen and How to Be Heard (getAbstract Summary) LinkedIn
- 37. How to Manage Your Manager LinkedIn
- 38. How to Project Vocal Confidence LinkedIn
- 39. How to Set Goals When Everything Feels Like a Priority LinkedIn
- 40. How to Train Your Brain for Maximum Growth LinkedIn
- 41. How to Work Smarter, Not Harder: Save Time and Money and Increase Productivity LinkedIn
- 42. Influence Without Authority (getAbstract Summary) LinkedIn
- 43. Information Literacy LinkedIn
- 44. Jodi Glickman on Pitching Yourself LinkedIn
- 45. Leadership Mindsets LinkedIn
- 46. Leadership Tips, Tactics and Advice LinkedIn
- 47. Leading in Uncertain Times LinkedIn
- 48. Leading without Formal Authority LinkedIn
- 49. Learning Brainstorming LinkedIn
- 50. Making Quick Decisions LinkedIn
- 51. Mindsets and Strategies for Negotiation Success LinkedIn
- 52. One-Minute Habits for Success LinkedIn
- 53. Overcoming Cognitive Bias LinkedIn
- 54. Overcome Overthinking LinkedIn

- 55. Presentation Tips for Pitching to Investors LinkedIn
- 56. Project-Based Learning: STEM to STEAM LinkedIn
- 57. Psychological Safety: Clear Blocks to Innovation, Collaboration, and Risk-Taking LinkedIn
- 58. Simple Habits for Complex Times (getAbstract Summary) LinkedIn
- 59. Smart Thinking: Overcoming Complexity LinkedIn
- 60. Strategic Thinking LinkedIn
- 61. Strategies to Improve Self-Awareness LinkedIn
- 62. Strategy: A History LinkedIn
- 63. Subtle Shifts in Thinking for Tremendous Resilience LinkedIn
- 64. Sustainability Strategies LinkedIn
- 65. The 7 Secrets of Responsive Leadership (getAbstract Summary) LinkedIn
- 66. The 10 Essentials of Influence and Persuasion LinkedIn
- 67. The Art of Leadership (getAbstract Summary) LinkedIn
- 68. The Eight Essential People Skills for Project Management (Blinkist Summary)
- 69. The Five Thieves of Happiness LinkedIn
- 70. The Five-step Guide to Mastering Your Money LinkedIn
- 71. The Miracle Morning (Blinkist Summary) LinkedIn
- 72. The Practices of High-Performing Employees LinkedIn
- 73. Turning Weaknesses into Strengths LinkedIn