

# JEAN NJOROGÉ, PH.D.

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Highly effective Data Scientist and Intellectual Property(IP) Professional with over 13 years of experience specializing in leveraging skills and knowledge in critical thinking, problem solving, science and engineering. Offering an array of skills in designing algorithms to address current technical problems, capturing and assessing information to make improvements and facilitating presentations. Proven ability to test working hypotheses to uncover key trends. Track record of success adapting in dynamic environments to exceed client expectations.

## SUMMARY OF QUALIFICATIONS

- *Data Science & Data Mining*
- *Advanced Analytics & Simulation*
- *Statistical Testing Methods*
- *Machine Learning Projects*
- *Technology Commercialization*
- *High Performance Computing*
- *Extracting Key Data for Analysis*
- *Big Data & Predictive Modeling*
- *Natural Language Processing*

## PROFESSIONAL EXPERIENCE

### DATA SCIENCE FELLOW | *Insight Data Science, New York* May 2017 – Present

- Utilized Latent Dirichlet Allocation from *gensim* python library to extract technological topic & topic trend over time.
- Collected and organized 90,000+ documents from patent office API with Python, MongoDB and PostgreSQL.
- **Developed rich interactive graphics and data visualizations** of large structured data in browser-friendly formats.

### LICENSING ASSOCIATE | *Technology Commercialization, Texas A&M University* 2014 – 2017

- Managed a **broad intellectual property portfolio** of 150+ scientific inventions in engineering and physical science.
- Helped create new ventures (cloud platform for seismic data analytics; calculus game-based learning system), crafting strategic alliances and business development efforts to identify potential partners and data-driven marketing strategy.
- **Drafted, negotiated and licensed technologies to various industry segments with long-term ROI.**
- Mapped invention disclosure relationships using linear regression to guide patenting and licensing strategies.

### LICENSING ASSOCIATE | *Technology Transfer Office, University of Texas-Dallas* 2013 – 2014

- Managed a portfolio of nanotechnology, advanced material and software inventions.
- Conducted due diligence, patentability and **market data analyses on new innovation disclosures.**
- Implemented strategic decisions on intellectual property protection and commercialization pathways.

### POST-DOCTORATE FELLOW | *Computational Chemistry & Biochemistry, University of Texas* 2013 – 2014

- Performed **large scale data analysis, combined with statistical mechanics** to compute thermochemistry, vibrational properties and NMR spectra as well as interpreted complex simulation data using statistical methods.
- Supervised & trained lab scientist on material informatics tools, statistical methods and High-Performance Computing.

### RESEARCH ASSISTANT & DATA SCIENTIST | *Computational Material Science, Texas A&M University* 2008 – 2013

- **Discovered new materials with 10x improvement** in mechanical properties for high temperature applications.
- Combined material science, quantum physics, chemistry and math to predict new materials and presented insights.
- Investigated molecule-substrate interactions as well as characterized shock phenomenon, effect of stress-strain, molecule binding energy and molecule orientation on high impact.
- **Wrote analysis programs using Python, Perl and MATLAB-powered software for data analysis.**

## ADDITIONAL CAREER EXPERIENCE

*Technology Transfer Intern (2014) | Polymer Science Intern (2011) | Sr. Associate Chemical Engineer (2005-2007)*

## EDUCATION, CERTIFICATIONS AND PROFESSIONAL AFFILIATIONS

**Doctorate (PhD) – Material Science & Engineering**, Texas A&M University, College Station, TX, 2013

**Bachelor of Science – Chemical Engineering**, Prairie View A&M University, College Station, TX, 2005 (*Magna Cum Laude*)

*Big Data & Social Analytics Certification*, Massachusetts Institute of Technology, 2016

*Entrepreneurship & Technology Commercialization Certification*, Texas A&M University, 2013

Material Research Society | Society of Women Engineers

American Institute of Chemical Engineers (AIChE) | Association of University Technology Manager

Co-Founder Africa Women in Computing under Anita Borg Systems Community

## INDUSTRY ACCOMPLISHMENTS AND DATA SCIENCE SKILLS

**Several Industry Honors & Awards | Numerous Publications & Presentations | High-Profile Data Science Projects**

Machine Learning | Statistical Methods | Python | R | Perl | AWS | Jupyter Notebook | Matlab | SQL | Unix | d3 Visualization