

# John P Boudreaux

Applications-driven data scientist with chemical history and focus on ML in manufacturing environments

[john.boudreaux.93@gmail.com](mailto:john.boudreaux.93@gmail.com)  
[linkedin.com/in/boudreauxjohn/](https://www.linkedin.com/in/boudreauxjohn/)

(713) 430 6687  
[github.com/boudrejp](https://github.com/boudrejp)

## SKILLS

---

- Software/Languages: R (caret, dplyr, shiny, ggplot2), Python (numpy, pandas, sklearn, matplotlib), SQL, VBA, JMP, Minitab, MATLAB, Aspen, MS Office
- Frameworks: MS Azure, Google Cloud, AWS, HDFS, Hive, PySpark, Kafka, Git, Docker, Kubernetes
- Data Science: data pipelines, machine learning, statistical analysis, visualization, optimization, web scraping, experiment design and analysis, solution scoping and development
- Manufacturing: Production engineering, design of experiments, process design scale-up
- Business: business strategy development, index pricing analysis, cost benchmarking

## EXPERIENCE

---

**Data Scientist, BASF (G-FDB/OAS), Florham Park NJ + Houston TX** **February 2017 – Present**

- Interface with plant engineers to formulate production problems as data science problems
- Develop data processing pipelines and utilize ML methods for prediction
- Create and deploy R shiny interfaces for real-time process prediction and monitoring
- Optimize plant models to find ideal operating conditions based on trained ML models
- Co-develop packages in R and Python for internal use
- Coordinate collaboration efforts in machine learning and optimization/operations research topics
- Develop internal data science talent via trainings and managing recent graduates in rotational program
- Debug and document use of current data science infrastructure (on-premise and cloud)

**Market Specialist PDP, BASF (N-CPN/IP), Houston TX** **May 2016 – February 2017**

- Created and rolled out complete market mapping tool using MS Access and Excel VBA enabled systems, and provided training to both sales and marketing teams to show full capabilities
- Developed cost benchmarking document to assess cost position relative to competitors in market
- Created file to produce price-volume curves on demand for customer pricing analysis

**Quality Engineering PDP, BASF (G-PM/AD), Wyandotte MI** **September 2015 – May 2016**

- Led LSS Green Belt Project to reduce defects through Analyze phase with target of \$50K savings annually
- Supervised production trials to test changes in formulations
- Performed Gage R&R studies to analyze capability of prepolymer measuring device
- Collected and reported oven temperature performance to monitor maintenance improvements

**Production Engineering PDP Intern, BASF (NCG/U), Geismar LA** **May 2014 – August 2014**

- Expanded utilities information capabilities in 10 different plants by creating Aspen Process Explorer graphics system
- Led daily production team meetings to provide updates on plant operating status
- Presented production data at daily meetings and followed issues as necessary
- Researched, commissioned micro scale experimentation, and presented recommendations for brine squeeze project implementation

## EDUCATION

---

**The University of California, Berkeley**  
Master of Information and Data Science

**Graduation: August 2020**

**The University of Texas at Austin**  
Bachelor of Science: Chemical Engineering  
Business Foundations Certificate

**Graduation: May 2015**

## ORGANIZATIONAL MEMBERSHIPS

---

- Member, American Institute of Chemical Engineers