# Jingfei Cai

I am a data scientist who can quickly adapt to various challenges and is motivated to acquire new skills. I am eager to combine data science techniques with my experience in life sciences research and communication to catalyze data-driven decision-making and deliver high-quality work.

**Rockville, MD**
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**ailuropoda1864.github.io/portfolio**

## SKILLS

**Data Science:** Python (numpy, pandas, sklearn, statsmodels, matplotlib, seaborn, requests, nltk, etc.), SQL, Tableau
**Development:** Git, Unix

**Cloud Computing:** Amazon Web Services, Google Cloud Platform
**Computer (other):** Word processing, spreadsheet, slideshow, desktop publishing, web publishing, video editing

## EXPERIENCE

**General Assembly Data Science Immersive** | *Student* | Washington DC | June 2017 – September 2017
Participated in a 12-week, full-time, project-based training program that focused on statistics, data analysis and visualization, and machine learning. Projects include:
• **Liquor Sales + Linear Regression** (linear models to predict sales; cross-validation to evaluate model performance; regularization tactics to compare model performance; executive summary)
• **Web Scraping & Classification** (web scraping; BeautifulSoup; classification models (random forest, logistic regression, etc.); executive summary)
• **Predicting Terrorism/Bayesian Inference** (Markov Chain Monte Carlo; Bayesian Inference; filling in missing data)
• **Capstone: Topic Evolution in Life Sciences Research** (Extracting data from XML files with lxml; Natural Language Processing; dynamic topic modeling)

**LanguageLine Solutions** | *Over-the-phone Interpreter for Cantonese/Mandarin (contractor)* | August 2015 – present
Interpret conversations between Cantonese/Mandarin and English speakers (~500 hours), assisting clients in diverse fields including health care, 911, government, law enforcement, court, and general business

**The Journal of Visualized Experiments |** *Scientific Video Editor* | Cambridge, MA | June 2013 – April 2017
• Edited manuscripts and accompanying videos (over 1000) from various scientific disciplines (*e.g.* medicine, biology, neuroscience, immunology, behavior, bioengineering, engineering, chemistry, and environment)
• Addressed comments from authors and enhanced presentation of research methods and results
• Performed quality control on manuscripts/videos as a final step before publication

**Boston College, Department of Chemistry |** *Research Assistant* **|** Chestnut Hill, MA | July 2006 – April 2013
• Overexpressed and purified EF-hand domain of mammalian phosphatidylinositol-specific phospholipase; developed binding assays to identify potential lipid ligands of EF-hand protein; designed and produced site-directed protein mutants to identify lipid binding site(s); developed NMR assays using model membrane systems to study lipid-specific interactions of lung surfactant proteins A and D
• Summarized research progress in forms of slideshow/poster presentations, written reports, abstracts to three scientific conferences and manuscripts to journals

## EDUCATION

**Boston College, Graduate School of Arts & Sciences** | Chestnut Hill, MA
*Ph.D. in Chemistry* | May 2013
Thesis Title: "Investigations of Lipid-specific Interactions of Lung Surfactant Proteins and EF-hand Domain of Mammalian Phosphatidylinositol-specific Phospholipase C"

**Peking University, College of Chemistry and Molecular Engineering** | Beijing, China
*Bachelor of Science in Chemistry* | July 2005