

Rachan Bassi

3631 Walnut Street
Lafayette
CA 94549

Telephone: 425-623-0355
Email: rachanbassi25@gmail.com

Education

- **MS in Analytics**, University of San Francisco, Candidate, 2015.
- **PhD Applied Mathematics**, University of Birmingham, U.K., 2011.
Thesis Title: 'Absolute Instability in Curved Liquid Jets.'
- **MPhil Applied Mathematics**, University of Birmingham, U.K., 2007.
Upgraded onto the PhD program after achieving excellent results in MPhil exams.
- **BSc Mathematical Sciences**, University of Birmingham, U.K., 2006.

Work Experience

- **School of Mathematics, University of Birmingham, U.K.**, Postgraduate Teaching Assistant, 2006–2012:
Involved small group teaching as well as providing one-to-one help to undergraduate students from different academic backgrounds. Led computer labs in Matlab and LaTeX.
- **School of Mathematics, University of Birmingham, U.K.**, Technical Administrator, Feb 2011–April 2011:
Led a team responsible for meticulously proof reading, editing and accurately formatting over 100 examination papers typeset in LaTeX, by liaising directly with the academic setters within the School of Mathematics.

Selected Course Projects

University of San Francisco

- **Naive Bayes for Sentiment Analysis:**
Predicted movie reviews with 80% accuracy by developing a classifier in Python based on Naive Bayes.
- **Book Ratings Comparison:**
Compared book ratings across ebay, Amazon and Goodreads APIs by extracting data using Python and BeautifulSoup.

University of Birmingham, U.K.

- **Computational Solution of Model Representing Fluid Flow:**
Numerically solved fluid flow models represented by partial differential equations using finite element methods in Matlab. Presented research at numerous prestigious conferences like BAMC and IMA conferences in the U.K.

Scholarships and Awards

- **Mathematics International Scholars Programme**, University of Birmingham, 2007.
- **Dudley Docker Scholarship**, University of Birmingham, 2007.
- **MS in Analytics Fellowship**, University of San Francisco, 2014.

Skills

Python, R, Microsoft Excel, LaTeX, Matlab, Maple.