Daniel File, Ph.D.

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PROFESSIONAL EXPERIENCE

Freddie Mac   McLean, VA
Quantitative Analytics Senior   Sep 2015- present
- Audited financial models and communicated quantitative results to business stakeholders

The Data Incubator   Washington, D.C.
Fellow   Jun 2015- Aug 2015
- Analyzed 250,000 loans from lendingclub.com and created a model to predict loan default with 72% recall

Muhlenberg College   Allentown, PA
Visiting Assistant Professor of Mathematics   Aug 2013- May 2015
- Conducted original research in number theory to compute special values of L-functions which I presented at national and international conferences
- Supervised a student research team, found evidence to support an open conjecture in number theory using Python and C
- Did statistical analysis on cortisol data for a University of Pennsylvania lab using R leading to publication
- Developed statistics curriculum using R and RStudio statistical software

University of Iowa   Iowa City, IA
Visiting Assistant Professor of Mathematics   Jul 2010- Aug 2013
- Conducted original research on automorphic L-functions leading to publication in leading peer reviewed mathematics journals
- Taught undergraduate and graduate mathematics courses; Taught a mini-course on Algebraic Groups at Chinese Academy of Sciences, Beijing

EDUCATION

The Ohio State University   Columbus, OH
Ph.D. in Mathematics   Jun 2004- Aug 2010

The Ohio State University   Columbus, OH
B.A. in Mathematics   Sep 2000- Jun 2004
Magna cum laude, with honors in the arts and sciences,
with distinction in mathematics, Phi Beta Kappa

SKILLS

Python: pandas, scikit-learn, numpy, and matplotlib libraries; Git
Trained in Hadoop by Hortonworks; Experience with Spark, C, and Scala

HONORS

$4000 American Mathematical Society / Simons Foundation Travel Grant
The Ohio State University Presidential Fellowship: one year fellowship for outstanding research

INVITED LECTURES

Erwin Schrodinger Institute for Mathematical Physics, Vienna; Morningside Center of Mathematics Chinese Academy of Sciences, Beijing; Joint Meetings of AMS/MAA, Baltimore; Temple University; U. of Oklahoma; Texas A&M; Purdue; Clemson

SELECTED PUBLICATION

File, Daniel. On the degree five L-function for GSp(4). *Trans. Amer. Math. Soc.* **365** (2013), no. 12, 6471–6497.