Ian Mouzon | Curriculum Vitae

525 Welch Avenue, No. 6 – Ames, Iowa 50014

H +1 (904) 993 3898 • B imouzon@iastate.edu • imouzon.github.io

 imouzon

Education

Iowa State University   **Ames**
PhD, Statistics (Expected 2016)   *2010–current*
Research interests include data mining and machine learning, time series, and data technologies.

University of North Florida   **Jacksonville**
MS, Math   *2008–2010*
"Differential modeling of multivariate longitudinal data" (advisor: Pali Sen)

University of North Florida   **Jacksonville**
BS, Math   *2001–2006*
Minored in biology, histological research on mosquitoes during final year.

Awards

– Prudsys Data Mining Cup - 1st place team (2014)
– Prudsys Data Mining Cup - 5th place team (2013)
– GlaxoSmithKline Scholar award (2010)
– UNF Statistics Graduate Student of the Year (2010)
– UNF Math Undergraduate Student of the Year (2006)
– UNF Summer Biology Student Award (2006)

Experience

Iowa State University   **Ames**
Graduate research assistant   *2011–2014*
Currently an assistant on a grant obtained by Dr. Ulrike Genschel through the National Science Foundation (HRD-1036791) examining possible causes of the STEM gender gap in higher education, wherein female majors in Science, Technology, Engineering, and Mathematics tend to leave STEM at a faster rate than male students of similar academic background. Responsible for planning and performing statistical analyses of our data and summarizing and presenting the results;

Iowa State University   **Ames**
Graduate teaching assistant   *2010,2014–2015*
Course assistant for STAT 602, STAT544; Taught sections of STAT 101 and STAT 326 labs at ISU

University of North Florida   **Jacksonville**
Graduate teaching assistant   *2008–2010*
While earning my MS I was supported by the department on a teaching assistantship.

Duval County Public Schools   **Jacksonville**
Teacher   *2006–2008*
After graduation, I taught at Robert E. Lee High School in Jacksonville, where I helped establish the school's first film club.

Posters and Presentations

Research in Undergraduate Mathematics Education (contributed report)   **Pittsburgh**
Cluster analysis of STEM gender differences   *2015*
I. Mouzon, U. Genschel, X. Nguyen

American Mathematical Association of Two Year Colleges (regular session)   **Nashville**
The Role of Self-Efficacy in the Retention of STEM Students   *2014*
U. Genschel, X. Nguyen, **I. Mouzon**

Iowa State University (departmental seminar)   **Ames**
How ISU became World Data Mining Champ!   *2014*
G. Basulto-Elias, F. Cao, X. Cheng, M. Dragomirolu, J. Hicks, C. Lanker, **I. Mouzon**, L. Pan, X. Yiu

Joint Statistical Meeting (contributed paper)   **Boston**
Early College Perf., Gender, and Other Factors Influencing Continuation in STEM Fields   *2014*
I. Mouzon, U. Genschel, A. Carriquiry, X. Nguyen, A. Kaplan, E. Johnston, W. Kliemann, K. Koehler

Joint Statistical Meeting (contributed paper)   **Boston**
Stat. and Math. Self-Efficacy of Incoming Students at a Large Public University   *2014*
U. Genschel; A. Kaplan; A. Carriquiry; E. Johnston; W. Kliemannof; K. Koehlerof; **I. Mouzon**; X. Nguyen

Joint Statistical Meeting (contributed paper)   **San Diego**
Identifying Gender-Specific Factors Related to STEM Retention at a Large State Univ.   *2012*
U. Genschel, J. Riddles, **I. Mouzon**, A. L. Carriquiry, M. Degnan, E. Johnston, K. Koehler, W. Kliemann, H. Nguyen

Joint Statistical Meeting (contributed poster)   **San Diego**
Validating a Tool for Assessing Statistical Self-Efficacy in the Undergrad. Student Pop.   *2012*
I. Mouzon, U. Genschel, A. Carriquiry, M. Degnan, J. Riddles, E. Johnston, W. Kliemann, K. Koehler, H. Nguyen

Computing Tools

Statistics: SAS, R, Weka, FORTRAN, C   **Reporting**: LaTeX, Markdown, HTML, Shiny
Data Management: SQL (SQLite, MySQL)   **Editing**: Vim, shell, perl, vimscript, git

Data mining

- Data Mining cup 2013: I am very interested in machine learning and data mining. In 2013 I participated in the Data Mining Cup, an international data mining competition sponsored by Prudsys. The problem was based on classifying online shoppers as buyers or not based on a set of variables. We came in 5th place, were the highest ranked team in the US and were invited by Prudsys to Berlin to present our solution.

- Data Mining cup 2014: In 2014 I again participated in the Data Mining Cup. This year's problem involved classifying online purchases based on whether or not they were eventually returned. We won the competition this year. We were once again invited to Berlin by Prudsys and (more excitingly) presented our methods to the entire statistics department during one of the semesters seminars.

- Kaggle: I have participated in three Kaggle competitions since summer 2013, to varying degrees of success.

Professional References

- Dr. Ulrike Genschel // Iowa State // 1-515-294-7766
- Dr. Stephen Vardeman // Iowa State // 1-515-294-2535
- Dr. Daniel J. Nordman // Iowa State // 1-515-294-7777

Ian Mouzon | Curriculum Vitae
525 Welch Avenue, No. 6 – Ames, Iowa 50014

H +1 (904) 993 3898   •   B imouzon@iastate.edu   •   imouzon.github.io

imouzon

Fulcrum Analytics   March 9, 2015
Fulcrum Analytics
70 West 40th Street, Tenth Floor
New York, NY 10018

Dear Mr Adelsberg,

Thank you very much for taking the time to look over my CV in application for your analytics intern position. Since this internship offers a chance to use and gain experience in both reliability and visualization, I am very interested in being considered.

I am currently pursuing a doctoral degree in statistics at Iowa State University. The focus of my research has been developing an approach to clustering data that is structurally problematic for standard techniques (for instance, when much of the data is ordinal or categorical). My motivation for doing this came out of my work as a research assistant studying student retention in STEM majors and at the university in general. Much of the data available to us was messy - the variables were poorly defined, important features were missing or censored, and information that could have been important when examined on its own was often aggregated with other information. This work has given me a lot of practical experience with real data and led me to work on methods to extract useful information that could be lost or ignored in many circumstances.

The work I do also has a time-to-event structure that allowed me to gain experience using techniques from survival analysis. Additionally, several of the analytics competitions I have participated in have time components that needed to be respected in order to better model the underlying mechanisms. I am interested in building on my knowledge modeling time-to-event data because I have been able to use what I have learned up to this point to great effect - adapting a non-homogeneous Poisson process was key in the 2013 Data Mining Cup, for instance.

Through my time at ISU, I have gained a lot of experience summarizing complicated models and results in writing, graphically, and through the use of interactive tools like Shiny. Creating good visualizations of data is very useful in research meetings and in team-based projects, especially when there is an interactive component, where it is vital to communicate results in a way that everyone is up-to-date and involved enough to provide informed and thoughtful perspectives.

Thank you again for your time to consider my application and I hope to hear from you in the near future,

Ian Mouzon

Attached: curriculum vitæ