# Matthew J. Nizol

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# Professional

Michigan State University, East Lansing, MI, 2013 – Present

National Science Foundation Graduate Fellow

- Researched test data generation from conceptual data models
- Extended a state-of-the-art instantiation algorithm via novel model transformations
- Implemented research in a Python-based tool available at github.com/mnizol/ormpy
- Collaborated with an industry partner on research projects
- Communicated work via presentation and publication

#### United BioSource Corporation, Ann Arbor, MI, 2010 - 2013

Senior Clinical Programmer / Analyst

- Production and validation programming in SAS of data sets, tables, listings and figures in support of Phase I-III oncology and cardiovascular clinical trials
- Programmed safety and efficacy data sets and TLFs including
  - o Analysis of progression-free survival
  - o CA-125 response using Rustin criteria
  - Pharmacokinetic analyses
  - o Area Under the Curve (AUC) analyses of post-prandial lipids
- Followed CDISC standards in the creation of SDTM and ADaM data sets
- Worked in a highly collaborative environment emphasizing strict quality control
- Championed internal process improvement by developing a unit testing framework
- Gave technical talks at SAS conferences including MISUG, MWSUG, and PharmaSUG

# EDS / Hewlett-Packard, Flint / Pontiac, MI, 2003 - 2010

Services Information Developer II

- Designed, coded, and tested warranty analysis and reporting programs in SAS on Unix involving time to repair linear projections and forecasting
- Worked closely with customers to elicit requirements and to recommend solutions
- Designed a wildcard merge algorithm to assign claims responsibility to suppliers
- Lead programmer on GM's warranty and campaign reserve adequacy studies, which were reviewed by internal and external auditors and senior GM financial leadership
- Designed a method to consolidate heterogeneous claims categorization schemes
- Refactored a JSP-based web application that provided on-demand access to reports

#### **EDS**, Pontiac, MI, 2002 - 2003

Technical Co-op Student

- Developed an environment variable tracking utility written in C for the UG CAD system
- Developed platform independent code for Windows and Unix

### Education

# Michigan State University, 2013 – 2018 (expected)

- PhD in Computer Science & Engineering (in progress)
- GPA: 4.0/4.0

#### University of Michigan – Ann Arbor, 2004 – 2006

- Graduate course work, Computer Science & Engineering
- GPA: 7.33/9.0 over 15 credits

#### **University of Michigan – Dearborn,** 1999 - 2003

- BSc, Computer and Information Science; Honors Program Student
- Senior Design Team Project: JSP / MySQL ticket-tracking system
- GPA: 3.92/4.0, graduated with High Distinction

#### **Publications**

- Matthew Nizol, Laura K. Dillon, R.E.K. Stirewalt. "Toward Tractable Instantiation of Conceptual Data Models Using Non-Semantics-Preserving Model Transformations." 6<sup>th</sup> International Workshop on Modeling in Software Engineering, Hyderabad, India, 2014.
- Matthew Nizol. "A Simple Approach to the Automated Unit Testing of Clinical SAS Macros." PharmaSUG 2013 Conference Proceedings, Chicago, IL, May 2013.
- Matthew Nizol. "Using a Double DOW Loop to Compute Progression Free Survival."
  MWSUG 2011 Conference Proceedings, Overland Park, KS. October 2011.
- Matthew Nizol. "Tables as Trees: Merging with Wildcards Using Tree Traversal and Pruning." MWSUG 2010 Conference Proceedings, Milwaukee, WI. October 2010.

# Fellowships and Scholarships

- National Science Foundation Graduate Research Fellowship Program, 2014-2017
- University Distinguished Fellowship, Michigan State University, 2013-2018
- Chancellor's Full-Tuition Scholarship, University of Michigan Dearborn, 1999-2003
- Ronald C. Byrd Honors Scholarship, 1999-2000

# Awards and Honors

- Upsilon Pi Epsilon Honor Society for the Computing Sciences, 2002-present
- Emerging Leaders Program; James B. Angell Scholar; William J. Branstrom Prize

#### Service

- External reviewer: ISSTA 2014; RV 2014; IET Software Journal
- Technical Reviewer for Book: Lisa Fine. *PROC REPORT by Example: Techniques for Building Professional Reports Using SAS.* SAS Institute, 2013

# Certifications

• SAS Certified Clinical Trials Programmer Using SAS 9 [scored 98%]