Matt **McGinnis**

ASSOCIATE SOFTWARE ENGINEER WITH TRAVELERS

(252) 489-9355 | mcginnisma90@gmail.com | matt-mcginnis.github.io | matt-mcginnis | Matt McGinnis

Education

University of Delaware   *Newark, DE*
PH.D. & M.S. IN MATHEMATICS   *May 2013 - May 2018*
- Dissertation: Combinatorial and Spectral Properties of Graphs and Association Schemes

University of North Carolina Asheville   *Asheville, NC*
B.A. IN MATHEMATICS   *Aug. 2009 - May 2013*

Experience

Travelers   *Raleigh, NC*
ASSOCIATE SOFTWARE ENGINEER   *Sep. 2021 - Present*
- Currently maintain and develop the Bond Claim System Management application, the Letter Genie application as well as other applications within the Bond and Specialty insurance division.
- Development stack includes VB.NET, C#, .NET, Javascript, Microsoft SQL Server, MongoDB, AWS, Git

Farragut Systems   *Durham, NC*
SOFTWARE DEVELOPER I   *Nov. 2018 - June 2021*
- Maintained and developed both legacy desktop applications and freshly deployed web applications.
- Led and co-piloted several projects including the conversion of Matlab code to an Azure Web App, refactoring and data migration of a financial data reporting application for the Pennsylvania Compensation Rating Bureau and much more.
- Development stack included C#, .NET, Oracle SQL, Microsoft SQL Server, Azure Devops, Git, Subversion and Docker

Tech Talent South: Code Immersion Bootcamp   *Raleigh, NC*
STUDENT   *Sep. 2018 - Nov. 2018*
- Coding bootcamp providing an immersive introduction to web development using the Ruby on Rails framework.

University of Delaware   *Newark, DE*
ADJUNCT PROFESSOR, INSTRUCTOR & TEACHING ASSISTANT   *Aug. 2013 - July 2018*
- Math 242: Analytic Geometry and Calculus B. Topics include exponential and logarithmic functions, sequences, series, integration techniques, parametric curves and polar coordinates.
- Math 241: Analytic Geometry and Calculus A. Topics include functions, limits, differentiation and integration.
- Math 230: Finite Mathematics with Applications. Topics include set theory, probability, optimization, linear programming and introductory matrix methods.
- Math 210: Discrete Mathematics I. Topics include set theory, logic, induction, counting, introductory graph theory and power series.

University of Delaware   *Newark, DE*
RESEARCH ASSISTANT   *Aug. 2013 - May 2018*
- Used the eigenvalues of matrices associated with graphs to obtain results about structural and combinatorial properties.
- Developed and maintained Python code to search for subgraphs with specific structural properties. Analyzed and published results.

Software Development

Python 3, C# & .NET, SQL
EXPERIENCE
- More recently, I have been using Ruby on Rails to work on projects in Tech Talent South's Code Immersion program.
- Used Python and open source mathematical software, SageMath, to analyze properties of graphs for the past 5 years.
- All results from my research were typed using LaTeX.

Familiar
HTML5, CCS3, BASH AND GIT
- I have done work preparing web pages and have an understanding of HTML5 as well as CSS3 for front end development.
- I am familiar with basic Bash commands as well as basic Git commands used for version control.

Publications

- ***The smallest eigenvalues of Hamming graphs, Johnson graphs and other distance-regular graphs with classical parameters***
  A.E. Brouwer, S.M. Cioabă, F. Ihringer & M. McGinnis
  to appear in *J. Combin. Theory Ser. B* (2018).

- ***Cospectral mates for the union of some graphs in the Johnson scheme***
  S.M. Cioabă, W.H. Haemers, T. Johnston & M. McGinnis
  Linear Algebra Appl. **539** (2018), 219–228.