

# Matt McGinnis

ASSOCIATE SOFTWARE ENGINEER WITH TRAVELERS

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## Education

### University of Delaware

PH.D. & M.S. IN MATHEMATICS

- Dissertation: Combinatorial and Spectral Properties of Graphs and Association Schemes

Newark, DE

May 2013 - May 2018

### University of North Carolina Asheville

B.A. IN MATHEMATICS

Asheville, NC

Aug. 2009 - May 2013

## Experience

### Travelers

ASSOCIATE SOFTWARE ENGINEER

Raleigh, NC

Sep. 2021 - Present

- Currently maintain and develop the Bond Claim Management System 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 and Git.

### Farragut Systems

SOFTWARE DEVELOPER I

Durham, NC

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

### University of Delaware

ADJUNCT PROFESSOR, INSTRUCTOR & TEACHING ASSISTANT

Newark, DE

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

RESEARCH ASSISTANT

Newark, DE

Aug. 2013 - May 2018

- Used 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 and published results.

## Software Development

### Python 3, C# & .NET, SQL, Git

EXPERIENCE

- Six years experience with Python 3 and Git. Python 3 is my language of choice for personal projects. I am just as comfortable with Python 3 as C# and am looking to transition to a role where I get to use my knowledge of Python more often.
- Four years professional experience working with SQL, C# / .NET Framework.

### HTML5, CCS3, Javascript

EXPERIENCE

- Minor experience with HTML5 and CSS for development of personal website and small projects/bugs in the workplace.
- Basic knowledge of Javascript and frameworks like React and Vue. Minor experience developing with these tools in a professional capacity.

### Other Technologies

EXPERIENCE

- Big fan of Linux and using Vim as my main editor, exploring different plugins and discovering new quirks all the time.
- Interested in learning more about AWS and cloud computing in general. Scheduled to take the AWS Cloud Practitioner exam at the end of June.

## 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  
*J. Combin. Theory Ser. B* **133** (2018), 88–121
- 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.