

# SHANE M. GALLAGHER

Shane.M.Gallagher@gmail.com

<https://github.com/smg7d>  
<https://shanegallagher.herokuapp.com>  
(703) 856-5460

---

## SKILLS

---

**Languages:** C#, Python, C++, C, R, Javascript, MS SQL, VB.NET

**Tools/Frameworks:** .NET Core, Azure, Bash, Git/GitHub, Heroku

---

## WORK EXPERIENCE

---

**Loyal | Data Engineer**

October 2019 – Present

- Create .NET Core based ETL pipelines to import data from client databases in an automated fashion, working with technologies such as APIs, FTPS/SFTP, authentication methods, ORMs, Redis, MS SQL, and Azure.
- Create custom SQL views to research, evaluate, and fix data issues as well as validate successful onboarding.
- Maintain thorough and easy to read documentation to facilitate cross-team collaboration and ensure consistency.

**Invesco | Sr. Associate CPM – Fixed Income Quantitative Investing**

August 2014 – September 2019

- Used R to implement statistical methods such as PCA, clustering and linear regression for competitor analysis.
- Created ad hoc VBA-based tools for various investment teams, primarily dashboards and prediction models.
- Created and delivered internal product messaging for a suite of quantitative fixed income ETFs across the firm. Primarily directed towards the sales force, this included whitepapers, sales decks, and other collateral.

**Fannie Mae | Financial Analyst I**

August 2012 – August 2014

- Automated complex monthly accounting processes using VBA and SQL, saving roughly 50 hours of work a month.
  - Modeled new CMO deals and assisted in the quarterly forecast of the firm-wide balance sheet.
- 

## EDUCATION

---

**University of Virginia, Charlottesville, VA.**

August 2012

- Masters of Science in Commerce (Finance concentration).

**University of Virginia, Charlottesville, VA.**

May 2011

- Bachelor of Arts with majors in Economics and English.

**CFA Institute**

August 2016

- Charterholder since 2016. Completed all three levels on the first attempt.
- 

## PROJECTS/PUBLICATIONS/COMMUNITY

---

**PyAtl Steering Committee – Speaker Coordinator**

August 2019-Present

- Responsible for booking new, diverse, and interesting speakers to present at our monthly meetups.

**The Friendship Paradox (Python: Requests, Pandas, Seaborn)**

July 2019

- Verified a proven property of social network graphs by gathering, exploring and visualizing data from Instagram.
- Addressed API call limits by programmatically switching accounts and caching data to prevent duplicate calls.
- Minimized 12 day run time by offloading API calls to a raspberry pi and using Twilio SMS to send status updates.

**ASCII Zelda (C++: Standard Library)**

February 2018

- Created a console-based video game with over 20 classes representing various player, space, and item objects.
- Achieved zero memory leaks by dynamically allocating and freeing heap memory comprehensively.

**Chat Application (VBA, SQL)**

May 2017

- Created an Excel-based application that uses SQL and VBA read and write to a central “chatroom” file.
- Implemented chat functions through a GUI based on Excel’s native userforms.

**“Responsible Investing in Focus: Emerging Market Bonds” *Risk and Reward*, Invesco Ltd.**

May 2018

- Gathered, cleaned, and visualized data to summarize the tradeoffs of responsible investing in emerging markets.