

# Jay Speidell

## Data Science



[jayspeidell.com](http://jayspeidell.com)\*



[jayspeidell@gmail.com](mailto:jayspeidell@gmail.com)



[linkedin.com/in/jayspeidell](https://linkedin.com/in/jayspeidell)



[github.com/jayspeidell](https://github.com/jayspeidell)



434.329.2371

\*My website shows off some cool projects, check it out!

## Education

B.S. Computer Science | Exp. 2020  
Old Dominion University  
Dean's List, 4.0 GPA while working full-time

B.A. English | Virginia Tech

## Skills

Languages:

C, C++, Java, Python

Data Skills:

Data Visualization, Exploratory Data Analysis, Machine Learning, SQL, Statistics

Computer Science Knowledge:

Cloud Computing Environments (AWS, GCE), Computer Architecture, Data Structures and Algorithms, Inserting USB Correctly On the First Try, Jupyter Notebooks, Software Engineering, Unix, Version Control (Git, Github)

Design Tools:

Illustrator, InDesign, Inkscape, LaTeX, OpenSCAD, PhotoShop, Unified Modeling Language

## On the Side

3D Printed Trail Maps:

I design and 3D print topographical maps with trail overlays.

Volunteer at Evergreen Mountain Bike Association:

I helped build and maintain mountain bike trails at Tiger Mountain, Duthie Hill, Black Diamond Open Space, and other Washington trail systems.

## Work Experience

Since Nov'15

Sales & Marketing Coordinator at Momentum, Inc

Seattle, WA

- Wrote industry-leading content on financial institution retail and workplace issues.
- Created some of the best proposals in the industry.
- Analyzed the credit union market using Python and Jupyter Notebooks, creating geographic data and maps to focus business development efforts.
- Led a website redevelopment project, improving site navigation and boosting engagement.
- Led a CRM and Marketing Automation migration project that resulted in higher engagement and better lead capture and follow-up.

Mar'08-May'15

Special Projects Manager at The Speidell Group

Lynchburg, VA

- Created engaging photo and video content for clients, as well as marketing collateral.

Jul'11-Mar'14

Kindergarten Teacher

Seoul, South Korea

May'10-Jun'11

Reporter at The Collegiate Times

Blacksburg, VA

## Projects

Nov'18

Toxic Comment Classification

- Performed a visual analysis on a public database of Wikipedia comments.
- Built a Support Vector Machine model incorporating Naive Bayes feature weights that classifies the toxicity of Wikipedia comments into several categories.
- Wrote a detailed report about my analysis, process, and results. Read it on my website!

Jul'18-Nov'18

Udacity Machine Learning Engineer Nanodegree

- Reinforced my knowledge of the implementation and application of popular supervised, unsupervised, and reinforcement machine learning algorithms.
- Used a Convolutional Neural Network to identify dog breeds.
- Built a Deep Deterministic Probability Gradient system to teach a simulated drone to fly autonomously.

Jul'18

PySwarms Open Source Contribution

- Added visualization features including Pyplot color gradient selection, making it easier for researchers to visualize their objective functions.
- Significantly expanded the library of built-in objective functions.
- Read more on my website!

Apr'18

Bike Sharing Demand on Kaggle

- Performed a visual statistical analysis of Washington DC's bike share ridership data.
- Built a machine learning model to predict future ridership.

Feb'18

Mercari Price Suggestion Challenge on Kaggle

- Performed exploratory data analysis on the Mercari item pricing data.
- Built an ensembling algorithm that trains models in a sequence, using the output of multiple models as features in an ensemble model.
- Placed in the top 18%.

Mar'17

Super Moon Attack

- Developed a game in Python where you can fly a space ship over the surface of the moon and shoot aliens.