(908) 801 6283 **Matthew V. Lancellotti** mvlancellotti@icloud.com

TECHNICAL SKILLS

- Data Science & Machine Learning: Pandas, NumPy, Scikit-Learn, data visualization, feature engineering, Spark, NLP, tree-based methods, clustering: KNN K-means, NN, TensorFlow, keras
- Web: Flask, TypeScript, JavaScript, nodejs, React, Angular, Mocha, Electron, Lodash, CSS3, SASS, Autoprefixer, HTML5, JSON, Browserify, SVG, D3, webscraping
- Concepts: OOP, functional, modularization, templating, web frameworks, APIs, testing: unit, e2e, CI
- Applications: git, GitHub, GitLab, VSCode, Sublime Text, Vim, MATLAB, Sagemath, JIRA, Docker
- More: Python, R, bash, RegExp, SQL, MongoDB, AWS, DigitalOcean, Jenkins, Scrum, Ansible, macOS, Linux

TECHNICAL PROJECTS *matthewlancellotti.com*

k_combinat_for_sage – k-combinatorics, parts of which already migrated to the open-source SageMath project
ProveMath – A place to store/learn/share math knowledge:

- Users login via OAuth and create nodes (visualized via D3.js) that store math content (with MathJax).
- Nodes connected with directed edges via a dependency structure (and stored in MongoDB).
- Extensive graph algorithms (on top of NetworkX) to suggest the next content for the user to learn.

For more projects, check out *github.com/MareoRaft*.

PROFESSIONAL EXPERIENCE

The Data Incubator *Data Science Fellow* *September 2020 - December 2020*

- Capstone Project aggregates tennis data (Pandas, NetworkX) to produce interactive visualizations (React).
- Built image classifiers using convolutional neural networks, pooling, and the Google inception model.

BNY Mellon *Senior Software Engineer* *December 2019 - July 2020*

- Continued development on company-wide DBaaS application using Python, Docker, and Ansible.
- Built flexible database comparison tool for end-users with TypeScript, React, and Material-UI.

Hub City Media *Senior Software Engineer* *October 2018 - November 2019*

- Added new features to existing AngularJS web app, fixed old bugs, and reduced the size of the code base.
- Implemented two new React apps, created private npm server and packages to share code across products.
- Collaborated with team to establish smart front & back end design patterns involving data modeling, validation, ES6 support, and dependency management via Scrum meetings and code reviews.

University of Virginia *Math Instructor & Research Programmer* *August 2016 - August 2018*

- Calculus II TA (Fall 2016), Calculus III TA (Spring 2017), Calculus I Instructor (Fall 2017, Spring 2018).
- Research project in combinatorics (see *github.com/MareoRaft/k_combinat_for_sage*).

Khan Academy *SAT Math Content Writer* *August 2014 - January 2016*

- Responsible for writing math questions conforming to College Board SAT and Khan Academy standards.
- Developed a JavaScript library (a wrapper around Raphaël) for SVG image generation.
- Collaborate with peers on potential math content issues and identify resolutions.

HONORS

- National Merit Scholarship
- AP Scholar Award (Scored 5 on 7 AP exams)
- GRE score: 97th percentile in Math and Reading
- Full Tuition Scholarship at Rutgers University
- Henry Sanders Scholarship for excellence in math
- Mathematics GRE scaled score: 840 (86th percentile)

EDUCATION

University of Virginia, *Charlottesville, VA* *August 2016 - May 2018*

Masters in Mathematics – GPA 3.78

Rutgers University, *New Brunswick, NJ* *August 2009 - May 2013*

Bachelor of Science in Mathematics – GPA 3.94
Bachelor of Arts in Music – GPA 3.89