

Jay Speidell

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EDUCATION

Old Dominion University

Bachelor of Science in Computer Science, 3.94 GPA

Norfolk, VA

Sep 2018 – Aug 2020

EXPERIENCE

Marketing Manager

Momentum, Inc

Nov 2015 – Present

Seattle, WA

- Increased sales productivity dramatically by implementing marketing and sales automation. Tasks for sales staff are now generated and assigned automatically based on website user activity, all communication takes place within the CRM, marketing content is delivered via automated workflows, and sales and marketing activities are assigned and tracked automatically.
- Created a new workplace analysis product to inform location selection with interactive maps and reports showing employee commute times to potential addresses. I did this in Python with the Google Distance Matrix API.
- Increased lead generation more than thirty-fold by flattening the website structure and funneling visitors into CTAs for high-value content.

PROJECTS

Open Source Contribution - PySwarms (Portfolio Link) | *Python, Matplotlib, numpy, pytest, Git*

- Created new objective functions for benchmarking particle swarm optimization parameters and improved existing functions.
- Discovered an opportunity to improve visualization with Pyplot gradients and submitted the feature as a separate pull request.
- Wrote unit tests covering my changes to the project.

ODUConnect (Portfolio Link) | *ReactJS, Python, SQL, Flask, Git, Redmine, YAML*

- Led the development of a full stack prototype application to connect industry professionals with mentoring opportunities at ODU.
- Built continuous deployment pipelines to update production code with changes to main.
- Led the front-end design, including process flows, UX, UI, and database requirements.
- Developed and deployed a REST API in Flask to connect the ReactJS front end to an MSSQL database.
- Broke front end components into discrete tasks that I prioritized and assigned to team members with instructions and tutorials to implement in ReactJS.

Galaxy Zoo Challenge (Portfolio Link) | *Python, PyTorch, OpenCV, numpy, Scipy, Jupyter*

- Performed a thorough analysis of the Galaxy Zoo data to inform my data processing and machine learning strategies.
- Developed a data processing pipeline that identifies and extracts the region of interest from images and transforms data into Pytorch tensors.
- Built a convolutional neural network that accurately describes images of galaxies and achieves goal root mean-square error.

CPU Temperature Approximation (GitHub Link) | *Python, pytest, pydoc*

- Built a matrix solver module from scratch and implemented cubic spline, linear least squares, and linear piecewise interpolation to approximate CPU temperature time series data using test driven development.

3D Printed Trail Maps (Portfolio Link) | *Python, numpy, QGIS*

- Developed a process to build 3D printable models of terrain overlaid with trails and streams based on raw elevation and hydrographic data combined with gpx track files.

TECHNICAL SKILLS

Languages: Python, C/C++, Java, SQL, HTML/CSS, LaTeX

Frameworks: Flask, JUnit, pytest

Developer Tools: Linux, Git, Make, Gradle, Google Compute Engine, AWS

Libraries: pandas, NumPy, Matplotlib, PyTorch, Scikit-Learn, Scipy