

# Miriam A Berkowitz

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Data analytics/visualization developer with 15 years of full life-cycle software engineering experience, aiming to leverage analytical and leadership skills to guide business operations and decision-making.

## SKILLS

**Technical:** SQL, Python, Pandas, matplotlib/Seaborn, MySQL, SQLAlchemy, MongoDB, JSON, HTML/CSS/Bootstrap, JavaScript, D3.js, Leaflet, Tableau, Hadoop/PySpark, Git/GitHub, C, Excel/VBA, MS Office, MAC OS  
**Leadership:** project management, oral and written communications, budgets/schedules

## EDUCATION

**The George Washington University** **Arlington, VA**  
*Certificate, Data Analytics and Visualization* **March 2018**  
Intensive 6-month bootcamp dedicated to data analytics and visualization

**Rutgers University** **New Brunswick, NJ**  
*Bachelor of Arts, Computer Science* **May 1984**  
Phi Beta Kappa; Henry Rutgers General Honors Program; GPA: 3.5/4.0

## PROJECTS

**CitySlip** **February 2018**

- Worked in team of 3 to analyze a city to provide a subjective score and dashboard with interactive graphs for a user to determine whether to move to the city
- Used Python, SQL, Flask, and various APIs to collect and analyze data; used JavaScript, HTML/CSS, D3, Plotly, and Leaflet to create a dashboard and graph the data
- <https://zipslip.herokuapp.com>

**Bacteria BioDiversity Dashboard** **January 2018**

- Used Flask, Python, and Pandas to design an API for a dataset of belly button bacteria
- Used Javascript, Plotly.js, HTML, and CSS to build interactive charts for the dashboard
- <https://bb-bio-dashboard.herokuapp.com/>

**Mission to Mars** **Fall 2017**

- Scraped various Mars-related websites and displayed the data on a website
- Used Python, Flask, MongoDB, BeautifulSoup, HTML/CSS, Heroku
- <https://mars-mission.herokuapp.com/>

**Weather Analysis Dashboard** **Fall 2017**

- Analyzed how weather varies based on proximity to the equator
- Used Python, Pandas, matplotlib, JSON, and the OpenWeather API to collect and analyze weather data; HTML/CSS and Bootstrap to create the dashboard; Github to deploy
- <http://miriamberkowitz.com/WeatherViz>

## WORK EXPERIENCE

### **Gesher Jewish Day School**

**Fairfax, VA**

***Committee on Trustees Member, Past VP Fundraising, and Past President*     June 2003 - Present**

- Trained 7 professionals to use donor database, improving pledge collections by 50%.  
Developed and analyzed customized reports, driving fundraising strategies
- Led fundraising efforts, recruited and trained multiple teams of over 40 volunteers to raise significant funds with an annual increase of 10% and up to \$500K per year
- Led Executive Committee in key decision making, strategic planning, and stakeholder communication, strengthening the Board and increasing community outreach and engagement

### **Sweet Wraps**

**Vienna, VA**

***Founder and Owner***

**October 2001 - Dec 2012**

- Designed, implemented, and maintained company website for displaying and ordering personalized candy bar wrappers for all occasions
- Designed, printed and wrapped candy bars with personalized wrappers

### **Systems Engineering Services Corporation**

**Reston, VA**

***Senior Systems Analyst***

**April 1995 - July 1999**

- Engineered and rewrote complex accounting system from inefficient code to consolidated Sybase SQL stored procedures, reducing execution time from 30 hours to 10 minutes weekly.
- Interpreted oil trading business needs and designed, coded, and tested technical solutions as part of 40-person team

### **Lockheed Martin Corporation (formerly IBM Federal Systems)**

**Gaithersburg, MD**

***Advisory Programmer***

**August 1984 - April 1995**

- Technical lead for 10-person team developing strategies and prototypes to re-engineer complex mainframe (classified) software systems onto UNIX platform; established and documented software standards and procedures for consistent development for 80+ person team
- Developed and integrated (classified) applications using C, Sybase, and SQL, delivering enhanced functionality of existing mainframe systems
- Designed, coded, integrated, and tested large-scale mainframe (classified) systems, as part of 300+ person project, developing thousands of lines of code
- First-hand experience with all phases of product development life cycle