

## EDUCATION

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- **Columbia University** New York, NY  
*Bachelor of Arts in Computer Science; GPA: 3.22* *Sept. 2014 – Feb. 2018*  
**Relevant Coursework:** Data Structures in Java, Advanced Programming, Programming Languages and Translators, Introduction to Databases, Artificial Intelligence, Computer Applications in Health Care & Biomedicine

## EXPERIENCE

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- **LiveStories (Series A Startup, focused on civic data storytelling)** Seattle, WA  
*Software Engineer* *Sep. 2019 - Present*
  - Developed new donut and bar chart components for a **React**, **d3.js**, and **TypeScript** component library
  - Implemented data transformation layers to ingest generic API data and return chart-specific data models
  - Improved charting UX by building custom data visualization controls (data grouping, bar axes, error bars, tooltips, legends, colors)
  - Introduced caching in a dynamically-populated menu and reduced page loads by 50%
  - Supported team through project onboarding and d3.js introductions/walkthroughs
- **Pedal Technologies, Inc. (Data Visualization Consultancy)** New York, NY  
*Technical Co-founder* *Aug. 2017 - Aug. 2019*
  - Oversaw client acquisition, contract oversight, project management, and technical development
  - *Barnard History Data Portal* for Barnard College
    - Developed a mobile-optimized **Flask** site to showcase research on the institutional history of Barnard College
    - Built UIs, API endpoints, and a **MongoDB** database for individual/batch record upload, editing, search, duplicate record detection, and **d3.js** data visualization
    - Configured and maintained **Gunicorn** and **Nginx** servers on an **Ubuntu** VPS
  - *MapMaker* for Eurasianet (independent news organization)
    - Built a cross-platform **Python** app for producing custom, publication-quality maps
    - Developed a map-generation engine to fetch geocoded data and compile multiple map layers with **matplotlib**
    - Implemented a custom greedy algorithm to solve the Point-Feature Label Problem
  - Data visualization for One For The World (community-driven non-profit)
    - Developed an interactive data visualization in **d3.js** to help with donor recruitment and public relations
    - Built a **Flask** data portal to visualize personalized donation data for almost 400 donors and 19 charities
- **Two Bulls LLC (Digital Product Consultancy)** Brooklyn, NY  
*Software Engineering Intern* *Summer 2017*
  - Developed UIs with **Angular.js** for the Verizon Digital Kiosk, an interactive citizen engagement kiosk
  - Developed an onsite maintenance GUI with a **Golang** web server for accessing OS environmental variables
  - Integrated **DynamoDB** and **Serverless** backend endpoints with CMS frontend
- **Citi Bike, subsidiary of Motivate** Brooklyn, NY  
*Software Engineering Intern* *Summer 2016*
  - Inducted into *HackNY*, a competitive NYC-based technology startup fellowship
  - Built a **Python** web app for the Citi Bike dispatcher team to monitor bike levels at stations across NYC
  - Developed *gbfs2geojson-js*, an open-source **npm** package that facilitates bike-share feed integration for approximately 50 cities worldwide

## PROJECTS *(for more information, visit <https://github.com/TheBatmanofButler>)*

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- **The Perfect Number:** Visual data story on federal corporate income taxes (viewed >1000 times in 24 hours)
- **PolitiColor:** Twitter sentiment analyzer and visualization for 2016 U.S. primaries (Top 30 Hacks at PennApps XIII)

## PROGRAMMING SKILLS

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- **Proficient:** JavaScript (React, TypeScript, d3.js), Python (Flask, numpy, pandas, matplotlib)
- **Familiar:** C, Java, Golang, MongoDB, Angular.js, Node.js, AWS (DynamoDB, S3, Lambda, EC2, EBS, Serverless), Google Cloud, DigitalOcean, Mapbox, Gunicorn, Nginx, Linux, Tensorflow, scikit-learn, CircleCI