

**Timothy James Barrett**  
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## EDUCATION

- **Stevens Institute of Technology** Hoboken, NJ  
*Bachelor of Science in Computer Science; GPA: 3.1* Sep. 2016 - May 2020

## WORK EXPERIENCE

- **Allvue Systems** New York, NY  
*Application Engineer, Operations* July 2020 - Present
  - Implemented Javascript Salesforce database search feature within proprietary Chrome extension increasing documentation cross-referencing productivity for 30 engineers, approved and managed through GitLab.
  - Wrote, tested, and deployed SQL scripts for client production environments to resolve trade data inconsistencies with back office providers.
  - Debugged product XSLT edge cases against custom client implementations to document defects and translate into consulting requests.
  - Managed product expectations and functionality for client base of over 50 different hedge funds, firms, and investment banks through email and phone.
- **New Jersey Innovation Institute** Newark, NJ  
*Project Assistant and Consultant, Innovation Services* June 2019 - Aug. 2019
  - Created the project prioritization system for NJII's largest innovation product, a platform to encourage and support physician incubation of high ROI solutions in Hackensack Meridian Health's internal workforce, securing a \$1,000,000 contract.
  - Negotiated directly with client executives to ensure operation within project budgets.

## PROJECTS

- **jamesbarrett.us** Haledon, NJ  
*Personal* October 2020
  - Designed a responsive single-page application in React for portfolio projects and contact information utilizing the React-Router library.
- **Stevens Shuttle System** Hoboken, NJ  
*Student* August 2019 - May 2020
  - Collaborated with students on Senior Design Project to create a user-friendly bus schedule application, increasing arrival time accuracy from 20 to 98 percent.
  - Used AWS Lambda operations to compile raw location data from third party bus API.
  - Utilized unsupervised machine learning to group bus arrival data and produce arrival time predictions within 2 minutes, accounting for popular stops, rushes, and day-to-day traffic ordinances.
  - Created a responsive React application to display predicted schedules for student use on both mobile and desktop devices.
- **Agent-based Model of Infectious Disease** Hoboken, NJ  
*Student* October 2019 - December 2019
  - Created a Python simulation to render the stages of the 2014 West Africa Ebola outbreak for a quantitative biology course final project.
  - Implemented agent-to-agent interaction such as rate of infection, vaccination effectiveness, and likelihood to evacuate impacted areas.
  - Used CSV exporting and graphing libraries to visualize and compare simulation data through charts over time.

## TECHNICAL SKILLS

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|--------------------------|---|
| Languages                | SQL, Python, Javascript, XSLT, Apex (Salesforce)                        |
| Technologies & Libraries | React, Node.js, AWS Lambda, Express, Pandas, Seaborn                    |
| Tools                    | SQL Server Management Studio, Webstorm, Visual Studio, Git, TortoiseSVN |
| Databases                | MySQL, MongoDB, Firebase Realtime DB                                    |