

**Timothy James Barrett**  
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## EDUCATION

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

## WORK EXPERIENCE

- **Allvue Systems** New York, NY  
*Application Engineer, Operations* July 2020 - Present
  - Implemented Salesforce database searching for proprietary Chrome extension increasing documentation cross-referencing productivity for 30 engineers.
  - Delivered SQL scripts for client production environments to resolve trade data inconsistencies with back office providers.
  - Documented client implementation defects and translated to 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 incubation of high ROI solutions within physician networks, securing a \$1,000,000 contract.
  - Negotiated directly with client executives to ensure operation within project budgets.

## PROJECTS

- **Workout Split Planner (exercise-planner.vercel.app)** Haledon, NJ  
*Personal* January 2022
  - Deployed and managing a React interactive workout routine builder designed for optimizing and visualizing weekly volume and timing with over 1300 exercises from the ExerciseDB API.
  - Modified the drag-and-drop library react-beautiful-dnd into controlled components to manipulate all states using hooks.
  - Utilized memoization to reduce render lag during client-side state updates.
  - Visualized aggregated planner data using responsive composed graphs from the recharts library.
- **Total Daily Expenditure Estimator (tdee-calculator.vercel.app)** Haledon, NJ  
*Personal* January 2022
  - Deployed a component-based React webapp for calculating caloric intake requirements based on human measurements using the Mifflin St-Jeor formula.
  - Utilized nested component mapping to efficiently list tables of macronutrient splits (protein, carbs, fat) for weight maintenance, loss, and gain.
  - Worked with a base of over a dozen current users to implement new features and increase accuracy.
- **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.
  - Exercised AWS Lambda operations to compile raw location data from third party bus API.
  - Utilized unsupervised machine learning to group bus data and predict arrivals within 2 minutes.
  - Built a responsive React application to display predicted schedules for student use on both mobile and desktop devices.

## TECHNICAL SKILLS

<b>Languages</b>	JavaScript, Python, TypeScript, SQL, C#, XSLT, Apex (Salesforce)
<b>Technologies &amp; Libraries</b>	React, Redux, Node.js, Express, .NET Framework, HTML, CSS, AWS Lambda
<b>Tools</b>	SQL Server Management Studio, Webstorm, Visual Studio, Git, TortoiseSVN
<b>Databases</b>	MySQL, MongoDB, Firebase Realtime DB