**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*
  - Resolved errors in SQL procs, XML data, and XSLT configs with XPath and SQL debugging queries.
  - Designed scripts to resolve trade and B2B data inconsistencies in client production environments.
  - Improved ticket prioritization process by implementing Salesforce database searching functionality.

- **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.

## PROJECTS

- **Workout Split Planner (exercise-planner.vercel.app)** — Haledon, NJ
  *React, Material UI, react-beautiful-dnd, recharts, ExerciseDB API* — *January 2022*
  - Deployed and managing an interactive weekly exercise routine planner and optimizer.
  - Modified drag-and-drop library into controlled components to manipulate all states efficiently using hooks.
  - Utilized memoization to reduce render lag during client-side state updates.
  - Implemented recharts library to visualize aggregated routine data using composed graphs.

- **Total Daily Expenditure Estimator (tdee-calculator.vercel.app)** — Haledon, NJ
  *React, Material UI* — *January 2022*
  - Deployed a webapp for calculating caloric intake requirements based on human measurements.
  - Utilized nested component mapping to list tables of macro ratios for weight maintenance, loss, and gain.
  - Worked with a base of over a dozen current users to implement feature requests and increase accuracy.

- **Stevens Shuttle System** — Hoboken, NJ
  *React, AWS Lambda, MongoDB* — *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 webapp to display predicted schedules for student use on both mobile and desktop devices.

## TECHNICAL SKILLS

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|---|---|
| **Languages** | JavaScript, Java, Python, TypeScript, SQL, GraphQL, C#, XSLT, XML |
| **Technologies & Libraries** | React, Redux, Node.js, Express, REST APIs, HTML, CSS, AWS Lambda |
| **Tools** | SQL Server Management Studio, Webstorm, Git, Docker, Kubernetes |
| **Databases** | MySQL, MongoDB, Redis, PostgreSQL |