# Abhijit Gupta

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#### **Education**

Yale University New Haven, CT

BS. Computer Science, BS. Applied Mathematics (GPA: 3.80)

Expected 2022

- Coursework: Data Structures, Directed Research, Linear Algebra, Vector Calculus, Discrete Mathematics
- Activities: YHack Organizing Team, Yale Computer Society, Yale Interactive Machines Group

# **Experience**

**Gatherly** Remote

### **Software Engineer**

August 2020 - Present

- Implementing backend and frontend updates to Gatherly.io, improving website performance and user experience
- <u>Leveraging knowledge</u> in JavaScript, TypeScript, NodeJS, ReactJS, Redux, HTML/CSS, GitHub

Yale University New Haven, CT

**Research Intern** | Interactive Machines Group

January 2020 - Present

- Building an end-to-end deep learning pipeline analyzing social group phenomena for human-robot interaction
- Optimizing custom data preprocessing, model architecture, and loss function to improve prior metrics by 14%
- <u>Leveraging knowledge</u> in Python, PyTorch, TensorFlow, GitLab, Neural Network, Scientific Writing

RTI International Raleigh, NC

#### **Data Warehouse Intern**

June 2020 - August 2020

- Designed campus monitoring dashboard to visualize temporal building occupancy, saving an estimated \$100,000
- Implemented automated demand prioritization system for the BI team, reducing manual preparation time by 80%
- <u>Leveraged knowledge</u> in Microsoft SQL Server, Microsoft Power BI, Data Visualization, Agile Methodology

Yale University New Haven, CT

**Research Intern** | Language, Information, and Learning at Yale (LILY) Lab

August 2019 - December 2019

- Trained ML model to classify salient events in 2D simulations with 91% accuracy (arxiv.org/abs/2005.00730)
- <u>Leveraged knowledge</u> in Python, SciKit Learn, Data Analysis, Machine Learning, Scientific Writing

# **Projects**

# Statbotics.io (statbotics.io)

January 2020 - Present

- Establishing an open-source full-stack data analytics platform for the FIRST Robotics Competition
- Developing Django REST API, ReactJS frontend (2,000+ visitors), Python PIP package (1,500+ downloads)
- <u>Utilizing</u>: Python, MySQL, Django Rest Framework, ReactJS, HTML/CSS, Travis CI, Google Cloud, GitHub

# YHack Website (<a href="mailto:yhack.org">yhack.org</a>)

March 2020 - Present

- Manage six developers designing the YHack frontend, YHack application system serving 2,000+ candidates
- <u>Utilizing</u>: Python, Django, Postgres, HTML/CSS, Heroku, GitHub, Project Management, Documentation

#### CourseTable (coursetable.com)

July 2020 - Present

- Contributing to team redesigning CourseTable, Yale's leading course search website, with modern frameworks
- Spearheading initiative using NLP on 10,000+ course descriptions to predict similarity, sentiment, keywords, etc.
- <u>Utilizing</u>: Python, GraphQL, Hasura, ReactJS, Docker, Natural Language Processing (TF-IDF, LSI, Word2Vec)

## **Skills**

Languages: (*Proficient*) Python, JavaScript/TypeScript, HTML/CSS, SQL, C/C++ (*Familiar*) Java, R, Matlab Frameworks: (*Proficient*) NodeJS, ReactJS, Django, NumPy, PyTorch (*Familiar*) GraphQL, MongoDB, TensorFlow Technologies: (*Proficient*) Git, Databases, Google Cloud Platform, REST APIs (*Familiar*) CI/CD, AWS, Docker