# Abhijit Gupta

abhijit.gupta@yale.edu | (919) 812-9038 | abhijitgupta.io | github.com/avgupta456 | linkedin.com/in/avgupta456

## Education

**Yale University**                                                                                                      New Haven, CT
BS. Computer Science, BS. Applied Mathematics (GPA: 3.80)                                             Expected May 2022
- Coursework: Systems Programming, Data Structures, Machine Learning, Linear Algebra, Discrete Mathematics
- Activities: YHack Organizing Team, Yale Computer Society, Yale Interactive Machines Group

## Experience

**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%
- Leveraged knowledge in Microsoft SQL Server, Microsoft Power BI, Data Visualization, Agile Methodology

**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%
- Leveraging knowledge in Python, PyTorch, TensorFlow, GitLab, Neural Network, Scientific Writing

**Yale University**                                                                                                      New Haven, CT
**Research Intern** | Language, Information, and Learning at Yale (LILY) Lab               August 2019 - December 2019
- Trained machine learning model to classify salient events in 2D physics simulations with 91% accuracy
- Contributed to research paper studying implicit physical reasoning in NLP (https://arxiv.org/abs/2005.00730)
- Leveraged knowledge 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**)
- Utilizing: Python, MySQL, Django Rest Framework, ReactJS, HTML/CSS, Travis CI, Google Cloud, GitHub

**YHack Website** (yhack.org)                                                                                March 2020 - Present
- Manage six developers designing the YHack frontend, YHack application system serving 2,000+ candidates
- Utilizing: 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.
- Utilizing: Python, GraphQL, Hasura, ReactJS, Docker, Natural Language Processing (TF-IDF, LSI, Word2Vec)

**Project Horus** (avgupta456.github.io/HackMIT-2019)                                                     September 2019
- Developed a receipt scanning tool using NLP and OCR, won the 2019 HackMIT FinTech Track among 30+ teams
- Utilized: Python, NumPy, Pandas, Amazon Web Services, HTML/CSS, Natural Language Processing

## Skills

**Languages**: *(Proficient)* Python, JavaScript, HTML/CSS, SQL, C *(Familiar)* Java, C++, Matlab, R, ROS
**Frameworks/Libraries**: *(Proficient)* Django, ReactJS, NumPy, PyTorch *(Familiar)* GraphQL, Pandas, TensorFlow
**Technologies/Concepts**: *(Proficient)* Git, Databases, Google Cloud, REST API *(Familiar)* CI/CD, AWS, Docker