RISHAV BHAGAT

Address: 9 Ponty Court, Monnmouth Jct, NJ 08852| Email: rishav@bhagat.io |Phone: 609-907-9096
Website: https://bhagat.io | Github: https://github.com/rishavb123| Linkedin: https://linkedin.com/in/rishavb

I am a senior student in high school seeking an internship position where I can utilize and enrich my computer science knowledge and work with new cutting-edge technology.

EDUCATION

SOUTH BRUNSWICK HIGH SCHOOL
GRADUATE YEAR: 2020
GPA: 4.34 (Weighted); 3.93 (Unweighted)
AWARDS AND ACHIEVEMENTS: Accepted into Georgia Institute of Technology for Computer Science; National AP Scholar; Scored 5 on eight Math, Physics, and Computer Science AP Exams; Scored 800 on both Mathematics Level II and Physics Subject SATs
ADVANCED COURSES: Artificial Intelligence, Computational Physics, Data Structures and Game Design, Mobile Application Development, AP Computer Science, Analysis, Differential Equations and Complex Analysis, Multivariable Calculus and Linear Algebra, Modern Physics, & AP Physics C

SKILLS

LANGUAGES: JavaScript, NodeJS, Python, Java, C++, C#, C, Swift, HTML, CSS
FRAMEWORKS: React, React Native, Angular, Express
SERVICES: Firebase, Google Cloud, AWS
TOOLS: Android Studio, Eclipse, Visual Studio, Visual Studio Code, Unity, Vi, Atom, PyCharm, Nano
CERTIFICATIONS: Google Analytics, Google Ads Fundamentals, Andrew Ng's Machine Learning Certificate

PROJECTS

SERVER DATA ANALYSIS
https://github.com/rishavb123/ServerData | https://data.bhagat.io
Developed a web application in the React Framework to visualize JSON server data in various forms, store it on firebase real-time database, and analyze the data using a machine learning algorithm called K Nearest Neighbors in a Python server.

SOLVING SCHRODINGER'S EQUATION WITH DEEP LEARNING
https://github.com/rishavb123/QuantumPhysicsWithDeepLearning
Solves the Schrodinger equation in an asymmetric (defined by any function within the well) infinite quantum well numerically using the Runge-Kutta method. Then using sample points from the well as inputs and points from the solved wavefunction as outputs, uses a neural network to approximate solutions at a much faster speed. Uses Fourier smoothing on wavefunctions.

COLLEGE DATA ANALYSIS
https://github.com/rishavb123/CollegeData
A neural network built using numpy (tensorflow models supported too) in python applied to my high school specific college data made to predict one's chances of being accepted into certain colleges. It uses a genetic hyperparameter optimization algorithm to choose the optimal "DNA" or hyperparameters for the best performance on the cross-validation data.

VIKING TUTORS
https://github.com/rishavb123/VikingTutors | https://vikingtutors.org
A platform for South Brunswick students to view personalized learning material such as videos and presentations made by South Brunswick personnel. Created with firebase cloud firestore and the YouTube data API for data and video storage.

3D MAZE PROGRAM
https://github.com/rishavb123/3DMazeGame
A program that reads in a maze design from a text file and then displays the maze in 2D and 3D. The user has the ability to control their character using the arrow keys or through a website served by a Java HTTP server built using TCP sockets accessible to devices on the network. Implemented an ai agent using a reinforced learning algorithm called value iteration that finds the most efficient path through the maze even through traps and portals.

LEADERSHIP & ACTIVITIES

COMPUTER SCIENCE CLUB OFFICER (September 2016 – Current)
Instruct students on how to code HTML, CSS, JavaScript, and Python and manage the backend applications of the club.
HACKSB ORGANIZER (April 2016 – Current)
Conduct a hackathon through Computer Science Club at South Brunswick.
NETELIXER INTERSHIP (June 2019 – August 2019)
Developed an AI Game to exhibit capabilities of AI tools (http://aigame.bhagat.io), and received training in Statistics and Forecasting, SEO Strategy and Content Development, Modern Paid Search Strategy, and Social Media Marketing.
MARTIAL ARTS INSTRUCTOR (2009 – Current)
Second-degree black belt and a part-time instructor where I teach curriculum, lead groups, and built character.