# Joshua Regencia Nghe

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#### **Education**

Stony Brook University Stony Brook, NY

B.S Applied Math and Statistics, 2nd major Information Systems | GPA: 3.46

2022 - present

- Relevant Coursework:, Data Structures and Algorithms, Discrete Mathematics, Survey of Probability and Statistics, Data Analysis, Database Design and Practice, Linear Algebra, Calculus 3, IT Project Management, Scripting Languages, Object Oriented Programming
- Awards
  - 2 year recipient Stony Brook Presidential Scholarship
  - Dean's List: Spring 2023, Spring 2024
  - AP Distinguished Scholar

# **Experience**

#### **Teaching Assistant - Stony Brook University**

AMS210 - Linear Algebra, Prof. Lim

- Hosted office hours providing assistance to over 170 students with course material and questions on problem sets.
- Grading and evaluation feedback for over 680 assignments, in correspondence with Prof. Lim
- Proctored Exams

#### Classwork

#### Carbody Neural Network | CSE 337

Python, PyTorch, Matplotlib, Pandas, Scikit-Learn, Artificial Intelligence, Data Visualization, Machine Learning, Predictive Modeling

- Cleaned and re-encoded data from database csv file to numpy float tensors
- PyTorch model w/ three nonlinear hidden layers, forward propagation utilizes RelU activation
- Trained and tested model on converted data and created graph of learning rate.

## Data Analysis | AMS 315

R, Data Analysis, Multiple Predictor Regression, Gene-Environment Interaction, Simulated Research Study

- Conducted study on synthetic data, predicting a model for gene-environment interactions up to 2nd order
- Multiple predictor linear regression to recreate statistical model that generated the data
- Large dataset w/ 1386 observations, 4 global variables, 20 genetic indicator variables, 1 outcome dependent variable.

## **Personal Projects**

#### 2048 Game Implementation

Python, Object Oriented Programming, Tile Based Games

- Recreated the popular tile based mobile game 2048
- Python module tkinter to create a user interface

# **SKILLS**

Programming: Java, Python, R, Ruby, SQL, Bash, MS Access, Excel, PowerPoint, Word

Languages: English (fluent), Mandarin (proficient)

Interests: Fitness / Weightlifting, Skateboarding, Soccer, Volunteering

Clubs / Organizations: SBU Skate, Stony Brook Web Development Club, ColorStack

Misc: Jira, Confluence, Agile/ Scrum Methodologies, Project Management, Data Analysis, Statistical Testing