



# THOMAS HARI E. BUDIHARDJO


An Aspiring Engineer, Internet Lover & Music Geek

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## EDUCATION

**B.Sc. in Computer Science** GPA: 3.734/4  
with Minors in Cybersecurity and Statistics Magna Cum Laude  
**Texas A&M University**  
 2017 – 2021  College Station, Texas


## PROJECTS

**GameShare Web App**  
Next.js, Tailwind CSS, MongoDB, Mongoose, npm, Vercel  
 Feb – May 2021

- Web application that facilitates the lending and leasing of board games using Stripe for payment
- Utilized Next.js to leverage the React framework to create a scalable application; deployed on Vercel
- Designed model to store user and inventory information in MongoDB
- Implemented area-based location queries by leveraging the OpenCage Geocoding API
- Cooperated with 4 other members using Bitbucket for version control and Discord for communication

**Points Tracker for TAMU Engineering Honors**  
Ruby, Rails, Bootstrap, PostgreSQL, Heroku, Microsoft Teams  
 Sep – Nov 2020

- Web application that allows officers and members to track members' activities in the organization
- Utilized Ruby on Rails with PostgreSQL in accordance with MVC design principles to implement RESTful routing and CRUD functionality; created documentation for clients, deployed application on Heroku
- Followed TDD principles leveraging RSpec to write integration unit tests and Capybara to create acceptance tests
- Adhered to agile methodology by working in two-week sprints and participating in daily standups and bi-weekly backlog grooming meetings utilizing Jira
- Cooperated with 4 other members using GitHub for version control and Microsoft Teams for communication

**Reify Mobile Platform**  
Python, SciPy, NumPy, scikit-learn, GIS  
 Jan – May 2020


- Mobile application prototype design that allows residents, city leaders, and contractors in the city of Nolanville, TX communicate as part of the ENDEAVR Interdisciplinary Team Project smart city challenge
- Weekly coordination meetings with team members from 6 different fields of study
- Implemented a k-Nearest Neighbor model to predict where floods are likely to occur as part of the alert system
- Awarded the Best Project, Creativity, and Pinnacle certificates

## COURSEWORK

Machine Learning    Data Science  
Statistics    Software Engineering  
Computer and Network Security  
Database Systems    Operating Systems  
Information Storage and Retrieval  
Data Structure and Algorithms  
Design and Analysis of Algorithms  
Discrete Structures for Computing  
Computer Organization    Linear Algebra

## LANGUAGES / TOOLS

C/C++  
Java  
Python  
R  
JavaScript  
CSS  
HTML  
SQL  
Ruby  
C#  
Haskell  
MATLAB  
LabVIEW



React    Next.js    Vercel    MongoDB  
PostgreSQL    Bootstrap    Tailwind CSS  
Ruby on Rails    Heroku    Git    Jira  
AWS    Amazon EC2    Bash    Unity  
pandas    NumPy    SciPy    scikit-learn

## ACTIVITIES

**St. Mary's Catholic Center Orchestra**  
 2017 – 2021  College Station, Texas

**Texas A&M Data Analytics Club**  
 2019 – 2020  Texas A&M University

**TAMU Team Programming Contest**  
 April 2019  Texas A&M University

**The Big Event Cleanup Volunteer**  
 March 2018  College Station, Texas

Interests: songwriting, finding new music, live-streaming, chess, soccer, Formula 1, FPS games