

Husam Solachuddin

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EDUCATION

University of California, Irvine

Major: Computer Science B.S. | Specialization: Intelligent Systems
Honors and Awards: Regents' Scholar, Dean's Honor List

Dec 2024

GPA: **3.696** | CS GPA: **3.759**

Relevant Coursework

ML and Data Mining, Data Structures, Algorithms, Full Stack Deep Learning, System Design, Operating Systems, Info Retrieval

PROJECTS

Google Street View Digit Recognition

Python, Tensorflow, Keras, Matlab, Pytorch, Scikit-Learn

Dec 2023

MACHINE LEARNING

- Used Keras to create a Convolutional Neural Network trained on a dataset of digit images from Google SV
- Trained a Logistic Regression model from Scikit-Learn on the same dataset
- Pre-processed images from the SVHN database to ensure learner compatibility
- Created variational autoencoder to generate images of class labels using Pytorch
- Generated heat maps of both models to identify key features extracted by each model using Tensorflow

Minesweeper AI

Python

Jun 2023

MODEL CHECKING

- Developed a backend model-checking algorithm to solve Minesweeper
- Achieved 100% success in easy, 70% success in medium, and 33% success in expert over 50,000 worlds

ZotVotes

C, Docker, Pthread, Unittest

May 2023

API, SERVERS AND MULTITHREADING

- Constructed a multi-threaded poll voting server in a Docker container for UCI students in a Linux environment
- Translated protocol messages between the polling server with PetrV API to ensure interoperation
- Utilized threads and synchronization locks to guarantee proper concurrency and data integrity

Tuter

Figma

Jun 2020

UI/UX DESIGN

- Created an application tailored to support students facing challenges in distance learning
- Responsible for both prototyping app and business model
- Project link: <https://devpost.com/software/tuter>

EXPERIENCE

UC Irvine ICS— Lab Assistant

Python, Git

Dec 2023 - Present

Irvine, CA

- Assists students in understanding programming concepts, tools, and Python libraries
- Debugs students' Python code and answers students' doubts during lab and office hours

Mathnasium— Instructor

Excel

Aug 2019 - Jan 2023

Tracy, CA

- Taught math and provided SAT preparation to high school students across varying math levels
- Managed and monitored individual student progress for the company database

SKILLS

Languages:

Python, C++, C#, C, Objective-C, Java, Javascript, SQL, R, Assembly, HTML/CSS

Libraries:

Numpy, Pandas, Scikit-learn, Matplotlib, TensorFlow, Keras, OpenCV, Pytorch, Lxml, NLTK/spaCy

Tools:

MATLAB, Anaconda, Linux, Windows, AWS, Jupyter, Docker, Git, VS Code, Figma, Excel

Communication:

English, Indonesian