

Akhil Krishna Mohan



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<https://www.github.com/nimberledge>
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EDUCATION

2017 - 2021 **B.S Mathematics & Computer Science**
Department of Computer Science
University of Illinois Urbana-Champaign

GRADE-POINT AVERAGE 3.26

PROJECTS

GAIME

Developed a system of generalized board game AI, via a library of functions that allows a user to make games and add AI with minimal effort. Researched, studied, modified, and implemented several AI algorithms such as Minimax (with alpha-beta pruning) and Monte Carlo Tree Search.

Double Pendulum Simulation

Developed a framework and a physics engine to run a simulation of a chaotic system with complex mechanics, modeled on a classical mechanics background.

WORK EXPERIENCE

University of Illinois **Course Assistant - Software Design Studio**
CURRENT, FROM JAN 2019

Moderated weekly code reviews for a group of students, allowing them to learn and improve from their mistakes. Helped create content and infrastructure to aid the course. Helped students one-on-one with niche coding problems.

University of Illinois **Research Assistant - PURE Program**
JAN 2018 – MAY 2018

Developed methods to model and solve partial differential equations using finite difference stencils, with the ultimate intention of modeling fluid flow. Presented a poster at research symposium (May 2018), and won 'Best Presentation' award for said work.

SM Netserv Technologies **Language Processing (NLP) Researcher/Developer**
MAY 2017 – AUGUST 2017

Used Machine Learning and Data Science to create a sentence-chunking algorithm, linking sentences talking about the same subject. Created an original sentiment engine using a self-designed algorithm based on Valence Aware Dictionary and sEntiment Reasoner (VADER). Scraped, corrected and made inferences from social media text data (Twitter, Facebook, Reddit)

TECHNICAL SKILLS

LANGUAGES Python, Java, C, C++, L^AT_EX
Ocaml, LISP, FSharp

LIBRARIES OpenFrameworks, Cython,
SpaCy, TextBlob, nltk, numpy,
matplotlib, graphviz, scipy, bs4,
pygame, pygame

COMMUNICATION SKILLS

POSTERS Poster at PURE Research symposium
(May 2018)

LEADERSHIP Project Head - GAIME
CS 196 - Freshman Honors
(Aug-Dec 2017)

Event Head - Mathtrix
(Mathematics festival)
(2017)

COURSEWORK

Introductory CS	Freshman Honors
Discrete Structures	Software Design Studio
Abstract Linear Algebra	Probability Theory
Compiler Design	Data Structures
Computer Architecture	Introductory Psychology
Numerical Methods	Real Analysis

ADDITIONAL INFORMATION

LANGUAGES English, Hindi, Tamil, Kannada

CREATIVITY Self-taught pianist and guitarist

REFERENCES

NAME	Mahalingam Vaidyanathan
POSITION	Vice-President of Engineering SM Netserv Technologies
EMAIL	malisharma@gmail.com
NAME	Jason Eric Turner
POSITION	Aerospace Engineering PhD University of Illinois
EMAIL	jasonet2@illinois.edu
NAME	James Schmidt
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