# Adithya Kethu

akethu@umass.edu (413)930-5170 Amherst, MA

An Honors undergraduate student majoring in Computer Science and minoring in Business.

#### **EDUCATION**

## University of Massachusetts Amherst - B.S., Honors in Computer Science

May, 2019 - December, 2022 (Expected) | CGPA: 4.0/4.0

Amherst, MA

**Highlights:** Dean's List (4/4 semesters); Departmental Honors Student; Chancellors Scholarship Award; Tech Member of HackUMass; Software Developer at BUILD UMass

#### **SKILLS**

Python (Django), Java, JavaScript, C, Node.js, HTML5, CSS, API (Using Flask), Flutter, Git, React, SQLite, Firebase, Heroku, Deep learning, Data Structures & Algorithms, PostgreSQL, MongoDB

### **WORK EXPERIENCE**

## **BUILD UMass** - Software Developer

August 2021 - current

- A part-time voluntary position at a "pro-bono" student-run organization called BUILD UMass.
- We build software products such as websites, apps for micro-organizations around UMass for free.

# University of Massachusetts Amherst - Resident Assistant

August 2021 - current

Strategizing academic planning and managing residents in the dorm by collaborating with peers and mentors.

## Data Systems Lab - Undergraduate Research Assistant

June 2021 - current UMass Amherst

- Working on a project called 'NextDoor' which uses deep graph learning to accelerate graph sampling using GPU's.
- Currently working on "Stochastic Training in Graph Neural Networks (GNN's)" and "Rejection Sampling with Deep Graph Learning" using Python and PyTorchmodule.

## **Toothprints PC** - Software Engineering Intern

May 2021 - August 2021 Natick, MA

- Learnt a multitude of technologies: built the python backend for a published app, built a website using React, built a
  website using HTML, CSS, Node.js and Express.js and built the front end for an app from scratch using Flutter and
  Dart.
- More info can be found at <a href="https://akethu.github.io/adithyakethu/startup.html">https://akethu.github.io/adithyakethu/startup.html</a>.

#### HackUMass - Tech Member

May 2021 - current

• We are working on the official HackUMass Website and the dashboard (built using Ruby on Rails).

## Human Computer Interaction & Visualization Lab - Undergraduate Research Assistant

May 2021 - August 2021 UMass Amherst

• Built a form from scratch using HTML, CSS, XML, Oracle SQL Database and Node.js. The form also has dynamic components coded using JS.

• Access the project at <a href="https://github.com/akethu/hci-age-vis">https://github.com/akethu/hci-age-vis</a>.

## University of Massachusetts Amherst - Supplemental Instructor

Jan 2021 - May 2021

• Conduct review sessions and help students prepare for course material related to programming in Java by working alongside the class Professor.

#### **PROJECTS**

**Around UMass with Deep Graph Learning** - Built from scratch using python, Django, PyTorch and deep graph library

- Built an interactive navigator for my college, UMass Amherst, using tensor graphs: https://github.com/akethu/UMass-Map-DGL
- Shows the nearby buildings to a specific building and also the shortest distance (along with magnitude and duration of travel) between any twobuildings.

**Pac-Man** - Built from scratch using HTML, CSS and JS.

• Recreation of the famous arcade game: includes features such as AI controlled ghost, pro-mode, timer, automatic scroll-lock, scoreboard and much more: <a href="https://github.com/akethu/pac-man">https://github.com/akethu/pac-man</a>

Pacified® Website - Built using React & Styled Components.

• Built this website (now published!) from ground up during my 21' summer internship: https://pacifiedapp.com/

Battleship Ai - Built from scratch using HTML, CSS, and JS.

• Recreation of the famous board game: includes features such as AI controlled opponent, automatic placement of ships, auto scroll-lock, auto control-lock and more: <a href="https://github.com/akethu/battleshipAi">https://github.com/akethu/battleshipAi</a>

**Gnathic-Click App** - Built from scratch using Flutter, Python, Flask & dart.

• Coded all the pages of the app using material UI, dart and pubdev packages: https://akethu.github.io/adithyakethu/startup.html

Simple To-Do CLI - Built from scratch using Python, Click and SQLite.

• A simple command line interface, integrated with password authentication, that lets users register/create/delete to-do tasks. https://github.com/akethu/cli-todo

Covimune: All-in-one medical dashboard -Built from scratch using HTML, Tailwind CSS, API, Firebase and JavaScript.

• An all-in-one medical dashboard to analyse, store, remind and share medical data among all hospitals: <a href="https://shorturl.at/aisK9">https://shorturl.at/aisK9</a>

#### Conferences

• World Sleep 2022 Congress: Got selected to present a scientific app I built (Gnathic-Click app) in Rome.

## **Open-Source Contributions**

- Next Door (independent research study)(<u>https://shorturl.at/xBC45</u>)
- HackUMass IX Website(<a href="https://shorturl.at/guIN5">https://shorturl.at/mtvEY</a>)

#### LINKS

- My portfolio: <a href="https://akethu.github.io/adithyakethu/">https://akethu.github.io/adithyakethu/</a>
- LinkedIn: <a href="https://www.linkedin.com/in/adithyakethu">https://www.linkedin.com/in/adithyakethu</a>
- GitHub: <a href="https://github.com/akethu">https://github.com/akethu</a>