

# ADITHYA KETHU

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## EDUCATION

### University of Massachusetts, Amherst

Amherst, MA

Honors in Computer Science and minoring in Business

September 2019 - December 2022

**Awards:** Dean's List; Chancellor's Award for Merit;

GPA: 3.99/4.0

**Relevant coursework:** Machine Learning; Artificial Intelligence; Algorithms; Data Structures; Web Programming; Programming methodologies; Reasoning under Uncertainty; Computer Systems (C); Introduction to Computation

## SKILLS

Tools/Frameworks: Spring Boot, Django, Flask, Docker, Kubernetes, Git, Flutter, Node.js, Deep Learning

Technical Languages: Java, Python, React, JavaScript, C, HTML5, CSS3, SQL, NoSQL

## EXPERIENCE

### WAYFAIR LLC

Boston, Massachusetts

#### Software Engineering Intern - Recs Platform Team

June 2022 - Present

- Spearheaded the production of a full-stack application using Spring Boot (Java), React, SQL, Docker & Kubernetes.
- My tool improved efficiency by 60% by allowing engineers to edit recommendation algorithms without any code.
- Built RESTful APIs, built modularized code structures, productionized database, created documentation, created unit tests, built reusable React components, contributed towards SDK feature releases, amongst others.

### TOOTHPRINTS PC

Natick, Massachusetts

#### Software Engineer Intern

May 2021 - May 2022

- Worked with an orthodontist on helping him revise, design and manage the technical landscape for the company.
- Built a python algorithm for a scientific app (Pacified App®, now published) by reviewing scientific journals.
- Used a face recognition API to code the algorithm which suggests the *scientifically* right pacifier for a baby based on facial biometric measurements. Generated [mathematical models](#) to verify results.
- Built the [company website](#) from scratch using HTML5, CSS3, Bootstrap, JQuery and API (for contact form).
- Built a [website](#) from scratch using React for the Pacified App®.

### BUILD UMASS

Amherst, Massachusetts

#### Tech Lead

August 2021 - Present

- Managed 3 software developers and 3 business developers throughout the software lifecycle.
- Spearheaded the production of an OCR application, which can analyze text/match similar images.

## PROJECTS

### AROUND UMASS WITH DGL - BUILT USING PYTHON, DJANGO, PYTORCH AND DEEP GRAPH LEARNING (DGL).

- Built an interactive navigator for my university from scratch, using tensor graphs.
- Used a combination of DFS, BFS and DGL graphs to recommend the shortest path between 2 nodes (buildings).

### GNATHIC CLICK APP - BUILT USING FLUTTER, PYTHON (FLASK), FACE DETECTION ALGORITHM & MONGODB

- Spearheaded the production by designing and coding the UI for the app from scratch using Flutter & Dart.
- Designed a Random Forest algorithm to scan & predict cranio-facial growth condition with upto 90% accuracy.

### PACIFIED APP® - BUILT USING PYTHON, DJANGO, DEEP GRAPH LEARNING AND FACE ALIGNMENT ALGORITHM.

- Designed an algorithm for a published [app](#) which scans the face and suggests the scientifically-right pacifier.

### STUDY BUDDY - BUILT USING JS, NODE.JS, BOOTSTRAP, HEROKU & MONGODB ATLAS.

- Designed & coded a [platform](#) which enables students to find study peers for their respective classes.
- Lead production for features such as user/group creation, notifications, authentication, setting pipelines, etc.

## CONFERENCES

### WORLD SLEEP 2022, ROME

March, 2022

- Got selected to present an abstract thesis for Gnathic Click app's algorithm in Rome.
- Designed an algorithm which scans a baby's face and aids as a screening tool for orthodontists to diagnose prognathism or retrognathism; the app can save thousands of dollars for parents if diagnosed early.

### MASSACHUSETTS UNDERGRADUATE RESEARCH CONFERENCE, REMOTE

April, 2022

- Got selected to present an abstract thesis for Gnathic Click app's algorithm.

## OPEN SOURCE CONTRIBUTIONS

- NextDoor: Headed an independent study on integrating Python constructs in C so as to fuse [NextDoor](#) with Deep Graph Learning modules.
- HackUMass IX: Co-built reusable HTML5, CSS (Bootstrap) components of the [website](#) with a team of 9.

**LEADERSHIP ROLES:** (1) Co-Founder at [QuickNotes](#) (2) Tech Chair at CICS [COST](#)