# Drshika Asher

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## **EDUCATION**

# **University of Illinois at Urbana Champaign**

May 2024

Bachelor of Science, Computer Science

**Coursework:** Algorithms and Models of Computing, Computer Architecture, Data Structures, Discrete Structures, Game Development, Linear Algebra, Numerical Methods, Probability and Statistics for CS, Software Design Studio

**Awards:** Bank of America Grace Hopper Scholarship Recipient, Clare Boothe Luce Research Scholar, Cargill Global Scholar, JP Morgan Chase WCS Scholar (x2), Illinois CS Tapia Travel Grant

#### **SKILLS**

Programming Python, C/C++, Go, Java, SQL, Rust, JavaScript, HTML, CSS, Kotlin, Swift (IOS Development) Technologies Git, Django, Flask, Firebase, Vim, MongoDB, AWS, REST API, REST Framework, UIKit

#### **EXPERIENCE**

# **MongoDB**

June 2023 - Present

Software Engineering Intern

Uber

Jan 2023 - April 2023

- Software Engineering Intern
   Designed and implemented a high-performance Golang REST API for Uber One Memberships with 60k queries per second (QPS)
- Achieved a 36.2% reduction in latency by optimizing the REST API implementation

# **Department of Computer Science**

August 2021 - Dec 2022

CS Student Research Scholar (CS STARS)

- Used Natural Language Processing (NLP) and ML models like Sparse Additive Generative Models (SAGE) and Latent Dirichlet Allocation (LDA) to identify key trends
- Coauthor on "Harmonizing the Cacophony" (accepted to ACM CSCW 2021)
- Utilized Svelte, Python, React and D3.js to track comment removal across 15+ subreddits

May 2022 – August 2022

Undergraduate Research Intern

- Research in AR/VR and Avatars with Dr. Mar Gonzalez-Franco of the EPIC (Extended Perception and Interactive Computing lab). Study is currently internal
- Leveraged Unity, C# Development, Azure Speech API and Python (TensorFlow)

**Cargill** Jan 2022 – May 2022

Full Stack Software Engineering Intern

 Collaborated with international clients and a team of 5 engineers and designers to build a rapidscale product prototype using technologies like React JS, Figma and Github Actions

EnterpriseWorks

May 2021 - August 2021

Frontend Developer Intern

- Improved Research Park website health by 63% and updated SEO reflect changes in Google Core Web Vitals
- Redesigned over 20 pages of internal websites written in HTML, CSS and PHP

## **PROJECTS**

## Tanpura App | C++, Cinder, CMake

github.com/drshika/tanpura-app

- Developed a virtual Tanpura Simulator with 7 keys using Cinder's Audio API Library
- Utilized C++'s Random Device to emulate natural plucking speed variations

# LCTRS | Flask, Python, Google OAuth

github.com/CS196Illinois/Group6

- Prototyped an NLP tool to summarize lecture transcripts to assist students in online learning
- Fine-tuned the T-5 Small model on 20 lecture transcripts to summarize conversational and presentation/lecture style academic content
- Designed and built a front-end user interface with Flask and Google OAuth for users to store their past summarized transcripts

## **LEADERSHIP**

# **Association for Computing Machinery**

May 2021 - May 2022

Corporate Chair

- Led a team of 6 members to raise over \$10,000 to support student interest groups in ACM during the pandemic
- Collaborated with leaders in the tech industry such as the CTO of Reddit to give tech talks to students through fireside chats for UIUC students