

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

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 - Present

CS Student Research Scholar (CS STARS)

- Used Natural Language Processing (NLP) and Machine Learning techniques like Sparse Additive Generative Models (SAGE) and Latent Dirichlet Allocation (LDA) to identify key trends and frameworks in Moderation on Audio Based Social Platforms (ABSPs)
- Coauthor on "Harmonizing the Cacophony" (accepted to ACM CSCW 2021) where I worked on evidence and analysis for key themes in ABSPs
- Utilized Svelte framework, Python, React and D3.js to build an interactive application to track comment removal across 15+ subreddits

Microsoft

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 rapid-scale 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