

# Priyan Vaithilingam

☎ (+1) 858-257-7317 | ✉ priyanmuthu@gmail.com | 🏠 priyan.info | 📷 priyanmuthu | 🌐 priyanv

Looking for research internship with focus in Programming Languages research.

## Education

Harvard University

PHD IN COMPUTER SCIENCE | ADVISED BY DR. ELENA GLASSMAN

Boston, USA

July 2020 - Present

University of California, San Diego

M.S. IN COMPUTER SCIENCE | GPA: 3.96/4 | ADVISED BY DR. PHILIP GUO

San Diego, USA

Sept 2018 - June 2020

Indian Institute of Technology (IIT), Indore

B.TECH. IN COMPUTER SCIENCE AND ENGINEERING | GPA: 9/10

Indore, India

June 2011 - May 2015

## Publications

### **Bespoke: Interactively Synthesizing Custom GUIs from Command-Line Applications By Demonstration.**

User Interface Software and Technology (UIST), 2019

Priyan Vaithilingam, Philip Guo

### **CodeTalk: Improving programming environment accessibility for Visually Impaired developers**

CHI 2018 (**Honorable Mention Award**) (\* co-first authors)

Venkatesh Potluri\*, **Priyan Vaithilingam\***, Suresh Iyengar, Vidya Y, Manohar Swaminathan, Gopal Srinivasa

## Work Experience

Software Engineer Intern, Microsoft

- Implemented and shipped Azure MySQL Query Recommender - Identify and automatically rewrite poorly written SQL queries for better performance.

Redmond, USA

June 2019 - Sep 2019

**Research Fellow, Microsoft Research India**

- Honorable mention paper in CHI 2018 | Worldwide 2nd place in Microsoft Hackathon 2017.
- Research in Human Computer Interaction, Programming Languages and Information Retrieval.

Bangalore, India

Mar. 2016 - July 2018

*Software Engineer*, Microsoft India

- Migrated the data services tool to Cosmos.
- UI test automation for internal data tools.

Hyderabad, India

June 2015 - Mar. 2016

## Relevant Projects <https://priyan.info/projects>

**Bespoke: Synthesizing GUI for command line applications by demonstration**

- Automatically synthesizes custom GUIs for command line application by demonstration.
- Published in UIST 2019

UCSD

**PSharp: Safer Asynchronous Programming Language**

- Enabled large scale testing of PSharp binaries in cloud (Azure).
- Open sourced in GitHub, used by teams in Microsoft Azure.

Microsoft Research

**Microsoft Garage's Email Insights: Faster and Relevant Email Search**

- A personalized email search that ranks emails based on relevance.
- Published the fuzzy search algorithm (C#) to Microsoft Outlook.

Microsoft Research

**Prius: Priority Inbox for Outlook**

- Refines user's mailbox by highlighting high priority e-mails for immediate action.
- Developed ML models using C# to analyze user's behavior and provide personalized experience.

Microsoft Research

**CodeTalk: Improving Visual Studio Accessibility for Visually Impaired Developers**

- Enhanced visually impaired developers' productivity by 40% by developing a tool with novel code navigation and audio debugging techniques using C# and Python.
- Honorable Mention Award CHI 2018 | Open sourced in GitHub

Microsoft Research

**SmartLockscreen: A lock-screen which understands your environment**

- Designed an intelligent lock screen application for android phones (using android studio and Java) that adapts the security level based on user-context.
- Developed sensor based context-detection technique and secure user profiles.

IIT Indore