

Priyan Vaithilingam

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Education

University of California, San Diego

M.S. COMPUTER SCIENCE

San Diego, USA

Present

Indian Institute of Technology (IIT), Indore

B.TECH. IN COMPUTER SCIENCE AND ENGINEERING | (9.02 OUT OF 10)

Indore, India

June 2011 - May 2015

Work Experience

Microsoft Research India

RESEARCH FELLOW

Bangalore, India

Mar. 2016 - July 2018

- Participating in cutting edge research in HCI, Programming Languages and Information Retrieval
- Won 2nd place worldwide in Microsoft Hackathon 2017 (consumer category)

Microsoft India

SOFTWARE ENGINEER

Hyderabad, India

June 2015 - Mar. 2016

- Migrating the internal data services tool to Cosmos:Microsoft's big data platform.
- MACH journalist for Microsoft Internal newsletter.

Student Entrepreneurship Support Cell, IIT Indore

CO-FOUNDER & E-LEADER

Indore, India

Aug. 2013 - Jan. 2015

- Won 2nd place in National Entrepreneurship challenge on behalf of the club.
- Secured funding for incubating 5 start-ups within the institute.

Microsoft India

SOFTWARE DEVELOPER INTERN

Hyderabad, India

May. 2014 - July 2014

- Worked on Enterprise feedback management.
- Contributed to Battleship game (internal) for XBOX Kinect.

Publications

CodeTalk: Improving programming environment accessibility for Visually Impaired developers. *ACM SIGCHI 2018 (Honorable Mention)*

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

Projects (<https://priyan.info/projects>)

CodeTalk: Improving IDE Accessibility for Visually Impaired Developers

Microsoft Research

SUBMITTED TO ACM SIGCHI 2018 | OPEN SOURCED IN GITHUB

- Enhancing programming accessibility for Visually Impaired developers by introducing quick navigation and audio debugging
- Worked on Audio Debugging using speech and non-speech audio.
- Soon to be Open-sourced in GitHub
- Results submitted to ACM SIGCHI 2018

Interactive Cane: ML enabled smart walking stick for Visually Impaired people

Microsoft Research

FEATURED IN MICROSOFT BLOG.

- Smart cane for visually impaired people, which uses Edge devices combined with sensors to enable easy navigation.
- Detects gestures including fall.
- Worked on efficient streaming of sensor data, and the cane hardware prototype.

PSharp: Safer Asynchronous Programming Language

Microsoft Research

OPEN SOURCED IN GIT HUB

- PSharp provides a systematic testing engine that can capture and control all specified nondeterminism in the system.
- Working on Dynamic Race Detection.
- Enabled large scale parallel testing of PSharp binaries in cloud.

Email Insights: Faster and Relevant Email Search

Microsoft Research

RELEASED BY MICROSOFT | FEATURED IN MICROSOFT BLOG

- New email experience, using relevance based search, fast auto-complete, intelligent auto-correct, custom commands and multi-tabbed UI.
- Features en-route to Microsoft Outlook and Exchange.
- Available in windows store.

SmartLockscreen: A lockscreen which understands your environment.

IIT Indore

OPEN SOURCED IN GITHUB

- Faster and safer way to unlock your smartphone with context awareness.
- Released in XDA Developers. Open sourced in GitHub
- Worked on context-awareness service and secure user profiles.

BattleShip Game for Kinect

Microsoft India

RELEASED INTERNALLY WITHIN MICROSOFT

- Dual Screen interaction model
- Contributed to the computer AI using probability models.
- Installed in Microsoft Offices across Redmond and Hyderabad.

Pac-Man in 3D: With autonomous playing

IIT Indore

OPEN SOURCED IN GITHUB

- Multiple Viewing modes.
- Worked on 3D game interface and minimax based AI algorithms for autonomous Pac mode.
- Built using OpenGL

Teaching Experience

Introduction to Azure Distributed Computing, Microsoft Research India

June. 2018

Introduction to Azure Distributed Computing, Microsoft Research India

June. 2017

High School Mathematics, Mahita, Hyderabad (Microsoft India Outreach Club)

Jan. 2016

Introduction to OOPS and C++, IIT Indore (Informal)

August 2012

Press & Media

Microsoft CodeTalk shines light for the visually impaired, Economic Times, Bangalore

May 2018

Research That Matters, Financial Express

Dec. 2017

CodeTalk: Rethinking IDE Accessibility, Microsoft Research Blog

Feb. 2017

AI's big leap to tiny devices opens world of possibilities, Microsoft Blog

June 2017

Find messages faster with the Microsoft Garage's latest release, Email Insights, Microsoft Blog

Feb. 2017

Honors & Awards

2017 **Microsoft Hackathon 2017**, Worldwide 2nd Place (developer category)

2015 **National Entrepreneurship Challenge, 2015**, 2nd Place