

# Priyan Vaithilingam

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## Education

### 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

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

Bangalore, India

Mar. 2016 - Present

### Microsoft India

SOFTWARE ENGINEER

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

Hyderabad, India

June 2015 - Mar. 2016

### Student Entrepreneurship Support Cell, IIT Indore

CO-FOUNDER & E-LEADER

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

Indore, India

Aug. 2013 - Jan. 2015

### Microsoft India

SOFTWARE DEVELOPER INTERN

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

Hyderabad, India

May. 2014 - July 2014

## Publications

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

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

## Press & Media

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**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

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

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