# Priyan **Vaithilingam**

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## Education

**Indian Institute of Technology (IIT), Indore**                                                                                                                                *Indore, India*

B.Tech. in Computer Science and Engineering | (9.02 out of 10)                                                                                          *June 2011 - May 2015*

## Work Experience

**Microsoft Research India**                                                                                                                                                          *Bangalore, India*

Research Fellow                                                                                                                                                                                    *Mar. 2016 - Present*

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

**Microsoft India**                                                                                                                                                                            *Hyderabad, India*

Software Engineer                                                                                                                                                                              *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**                                                                                                              *Indore, India*

Co-Founder & E-Leader                                                                                                                                                                  *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**                                                                                                                                                                            *Hyderabad, India*

Software Developer Intern                                                                                                                                                            *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 (*submitted*)**

ACM SIGCHI 2018

## 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

**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**, Wordlwide 2nd Place (developer category)

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