

Microsoft® Research

Faculty Summit 2010

Project Hawaii:

Resources for Teaching Mobile + Cloud Computing

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Hawaii Academic Program

Early Thoughts from External Research (1)

- **Available today**
(for pioneers who want to build things from scratch)
 - <http://research.microsoft.com/hawaii>
- **Targeting Fall 2010 semester for v1**
- **Targeting Spring 2011 semester for v1.1**
- **Package**
 - Software as a single VM download (target)
 - Instructor materials download
 - Student materials download
 - App store
 - Community

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Early Thoughts from External Research (2)

- **Remarks**
 - Anyone can download, freely available
 - Phone hardware available selectively
 - Modular materials – instructor drives pedagogy
 - These are not training materials
 - These are Microsoft products + Microsoft Research technologies – limited support
 - Peer support is key (community)

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Early Thoughts from External Research (3)

- **What we plan to do (subject to change)**
 - Survey the pilot courses for lessons learned
 - Assign budget for ~250+ phones (SIMs maybe)
 - Produce the download packages
 - Migrate to Windows Phone 7 compatibility
 - Plan to set up a student competition
 - Future integration with Imagine Cup (MS student competition – 2009: 300k students, 142 countries)
- **Seek feedback from interested professors (you are here!)**

Hawaii Website: <http://research.microsoft.com/hawaii>

Microsoft Research Project Hawaii

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Project Hawaii tools and resources for instructors



Project Hawaii tools and resources for students



Project Hawaii student-created apps library



Behind the scenes of Project Hawaii

Using the cloud to enhance the user experience on mobile devices

What Is Project Hawaii?

Innovations in WLAN (Wireless Local Area Network) and WWAN (Wireless Wide Area Network) technology bring us to today's mostly connected world, and smartphones are gaining acceptance rapidly among both enterprises and consumers. We foresee that the vast majority of applications that run on these platforms will rely on services provided by the cloud.

As part of Project Hawaii, we are investigating how we can use the cloud to enhance how we use mobile devices. Our goal is to foster the creation of a set of cloud-enabled mobile applications and associated support services so we can gain understanding about the systems and networking infrastructure needed to create the next generation of applications. The [MAUI project](#) and a university engagement effort are also part of this project.

Our current platform consists of a Windows Mobile 6.5 smartphone

University Engagement

In our experimental program, we're providing students with tools, services, and equipment for creating their own cloud-enabled mobile applications.

Participating universities in the spring 2010 program include:

- At the University of Southern California, [Ramesh Govindan](#) is teaching [Trends in Mobile and Cloud Computing](#).
- At the University of Wisconsin-Madison, [Suman Banerjee](#) is teaching [Mobile and Wireless Networking](#).
- At Duke University, [Romit Choudhury](#) is teaching [Wireless Networking & Mobile Computing](#).

[Learn more...](#)

“How to sign up”

- mailto: hiforum@microsoft.com



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