

Developer Resources at Columbia

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Workshop #1



adicu.com

DISCLAIMER

- **This is not a definite listing of resources** for student developers at Columbia, but rather an informed summary of resources I have encountered through light research and experience.
- **I expect you to contribute** your own experience and occasional research to wiki.adicu.com so this catalog can grow to be a greater resource than any one person could compile.
- If you know of a great resource that I missed, please announce it. If you know of more than a handful (I personally can hold any 3 resources in my hand at a time, so let's keep it at 3) announce the best of them, and add the rest to the wiki. Let's keep it civil.

Outline

- **Part I (10 slides)**: On-campus resources (Student groups, departments, affiliates, alumni, etc.).
- **Part II* (2 slides)**: Off-campus resources (Large corporations -- AAPL, MSFT, GOOG, AMZN, by decreasing mkt cap)
- **Part III* (1 slide)**: “Other” (small and medium sized companies, non-profit, open source)
- **NOTE**: The entire contents of this presentation (and more) is online at wiki.adicu.com under “Developer Resources”.

*I split up large and medium/ small companies because of the drastic difference in volume and quantity of resources the two types offer; also, everyone loves the number 3. I believe the latter is a stronger argument.

Part I: Notes

- If you can, follow along at http://wiki.adicu.com/doku.php?id=columbia_resources (sorry for the url mess, I haven't gotten docuwiki to play nicely with mod_rewrite).
- Again, this is all from the wiki. So please, edit and contribute.
- **ALWAYS** read the policy documentation of a resource before using it to develop anything (commercial, open-source, whatever). Companies (including Columbia) are big, they have lawyers, and they will use them.
- Each resource has a different policy. I'll try to briefly summarize the most restrictive ones, but I'm not a lawyer, and my interpretation should not be considered legal advice.

Part I: Educational

Tutorials, books, FAQs, support tickets

- Online:
 - HackCU.com
 - ADI wiki
 - CS department tutorials
 - CUIT support (tutorials, Helpdesk)
 - CCIT tutorials
 - Safari Tech Books
- Offline:
 - Library
 - CUIT HelpDesk

Part I: Events

- Clubs affiliated with Columbia that host events related to development:
 - ADI
 - ACM
 - STEM/ Startup lecture series (not really a club, but neither is ADI)
 - SETI
 - CORE
 - Columbia Venture Community
- Subscribe to the Columbia Startup Digest (thesStartupDigest.com) and the ADI calendar (events.adicu.com) for event information.

Part I: Hardware

- Labs on campus:
 - **CLIC lab**
 - **Microsoft Research Lab** (20 some-odd Windows dev machines in the CLIC lab)
 - **CS Department** (debatable status as a resource)
- Student discounts
 - **Dell**
 - **Apple** has two: a general student discount and a super-duper once-in-a-lifetime (literally) discount for student developers (anyone use this one before?).

Part I: Hosting

- Personal web space (<http://columbia.edu/~uni>). Supports html, JavaScript, (Python?)
- You can also request a dedicated IP (directly), and request unlimited bandwidth (indirectly through a faculty member).
- I was not able to determine if running a server was explicitly against CUIT's network use policy, but I assume it's not (the ports are open, after all).
- CUIT's Acceptable Use policy is, word for word, rather explicitly about what you are accountable for while using the Columbia network (nearly everything!). It also has some harsh words about using Columbia's network for "commercial purposes":

"Use of University systems or networks for commercial purposes, except where explicitly approved, is strictly prohibited. Such prohibited uses include, but are not limited to, development of programs, data processing or computations for commercial use and preparation and presentation of advertising material."

- Ask a lawyer what the ramifications of such a policy are. I'm not quite sure.

Part I: Software

- The majority of these titles are only available to verified affiliates of the CS department (people who have active CS accounts). Check each provider's policy for more information.
- Available titles:
 - Symantec Antivirus (all students, CUIT)
 - MATLAB (SEAS and CS account holders)
 - VMWare (CS account holders)
 - DreamSpark (all students, Microsoft). DreamSpark is a collection of developer software titles (VS, SDKs, etc)
 - MSDNAA (CS account holders, Microsoft). DreamSpark software titles + Windows 7 (no Office).
- NOTE: It's very important to read each vendor's policy regarding application development on student editions of software titles. Some are very strict. Read the policy statements, because companies have lawyers.

Part I: Misc.

- UNI authentication (WIND). CUIT offers a University-wide authentication service called WIND (think SSOL/Courseworks login). You can apply to use this service for applications relevant the Columbia community.
- Workspaces: Business School library, Butler (upper floors), CS lounge, Dorm rooms (the college equivalent of a garage).
- Copy writing: University Writing Center offers editing consultations for all types of writing in all stages of completion.

Part II: AAPL, MS, AMZN

- Apple
 - Apple Developer Connection: access to SDKs, IDEs, and other resources (I'm uncertain if there is a free student version. Normally you have to pay.)
 - DISCLAIMER: I have not done any serious development using Apple technology. Someone more knowledgeable, please fill in the wiki section.
- Microsoft
 - DreamSpark, MSDNAA (covered them in Part I). In brief, go with DreamSpark unless you have an active CS account and you need/ want Windows 7.
- Amazon
 - S3, EC2, Mechanical Turk
 - Willing to work directly with students in some cases, offer special rates for prototyping, proof of concept.
 - In my experience, they've been the most eager to assert themselves out of the three.

Part II: GOOG

- Development
 - Project hosting (Google Code), Google Web Toolkit (GWT), Android SDK, App Inventor (GUI for Android development).
 - AppEngine*: deployment solution for applications written in Java or Python.
 - Applications must be written explicitly for the AppEngine framework.
 - Abstracts technical details of deployment, and has a very generous “free” plan.
- Services
 - Voice, Sites, Docs, Wave (hah!), etc.

*Akiva swears by this thing. I have yet to use it.

Part III: Other

- Networking
 - NY Tech Meetup (second Tuesday of every month)
- Project hosting
 - Github (Git)
 - SourceForge (SVN, Git, Mercurial, Bazaar, CVS)
 - XP-Dev (SVN, Git, Mercurial)

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Future Workshops

Tentative Scheduling

- Hackathon Series: for Fall 2010 HackNY (Oct 9-10).
 - Tuesday, 9/28: Introduction to Ruby (1 hour)
 - Saturday, 10/2: Ruby on Rails crash course (~2-3 hours)
 - Tuesday, 10/5: Agile Development, taught by industry expert
- Early November (two series will be offered concurrently)
 - Webmaster series (HTML, CSS, Wordpress)
 - Python series
- December
 - Databases (summary of CS E4111 and CS E6111)

ADI Eboard Applications

- **ADI Eboard applications due Sun., Sept. 26.**
Apply @ adicu.com.
- We're looking for a few good souls to join the ADI eboard for the 2010-2011 school year.
- We're not looking for "PHP ninjas" or "1337 hax0rs", just team players who is comfortable with the idea of wearing many hats (eboard members do a bit of everything).
- Apply if you want to help build support for student development at Columbia.

Events this Week

- Google tech talk. **Weds., Sept. 22 @ 6pm.** Davis Auditorium.
- STEM and Startup Lecture Series. **Wed., sept. 22 @ 5:30pm.** Interschool Lab (7th floor CSPR).
- ACM meeting. **Thurs., Sept. 23 @ 6 pm.** Here (CS lounge, 4th floor Mudd).
Food will be served. Be there (or rather here, then).

But wait, there's more. Check the Columbia Startup Digest (thesStartupDigest.com)