IAP Course: Technologies for Speech and Language Processing
January 2016

Instructors
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Course Site
Course information, including the syllabus, slides, and optional readings can be found at: http://web.mit.edu/org/s/speechiap/www/index.html

Course Overview
The course is offered to MIT undergraduate and graduate students, as well as alums, who are interested in learning introductory speech and language technology theory. The program provides opportunities to apply skills that students learn. It consists of five two-hour sessions, each with a lecture followed by a hands-on activity.

Intended Learning Objectives
By the end of the IAP course, you will be able to:

• Name different types of speech sounds and identify them in a spectrogram.
• Make a spectrogram.
• Build a language model.
• Train an acoustic model with the Kaldi Recognition Toolkit.
• List several applications of speech and language technology.

Attendance
As the sessions are cumulative and there is a long waitlist, please attend all five sessions or contact one of the instructors to tell them if you cannot make it to class. The sessions are hands-on, so please come with a laptop and writing implement. Please silence your cell phone before class, and do not use your laptop to do social networking, check email, or surf the web since this not only prevents you from fully engaging in the class, but is also distracting to those sitting near you.

Schedule

<table>
<thead>
<tr>
<th>Session &amp; Date</th>
<th>Session Title</th>
<th>Time &amp; Location</th>
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</thead>
<tbody>
<tr>
<td>Session 1, Jan. 8</td>
<td>Acoustic-Phonetics</td>
<td>2-4pm, 66-148</td>
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<tr>
<td>Session 2, Jan. 11</td>
<td>Language Modeling</td>
<td>2-4pm, 66-148</td>
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<tr>
<td>Session 3, Jan. 13</td>
<td>Acoustic Modeling</td>
<td>2-4pm, 66-148</td>
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<tr>
<td>Session 4, Jan. 15</td>
<td>Building a Recognizer</td>
<td>2-4pm, 66-148</td>
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<td>Session 5, Jan. 19</td>
<td>Bringing Speech Technologies to the World</td>
<td>2-4pm, 66-148</td>
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