

4541.569

Advanced Artificial Intelligence

2014

School of Computer Science and
Engineering
Seoul National University

Lectures	<p>Week 1: Introduction to Evolutionary Systems</p> <p>Week 2: Introduction to Neural Networks</p> <p>Week 3: Introduction to Relational Learning</p> <p>Week 4: Introduction to Evolutionary Developmental Systems</p> <p>Week 5: Class Reading</p> <p>Week 6: Class Reading</p> <p>Week 7: Class Reading</p> <p>Week 8: Class Reading</p> <p>Week 9: Class Reading</p> <p>Week 10: Class Reading</p> <p>Week 11: Class Reading</p> <p>Week 12: Class Reading</p> <p>Week 13: Class Reading</p> <p>Week 14: Class Reading</p> <p>Week 15: Project and Paper</p> <p>Week 16: Project and Paper</p>
Software	<p>All software used in this course is available under some form of open-source licencing, so that you can freely install it on your own system. It is also available on the course server, which you are free to use for this course. All software runs under linux. It is highly likely that you will be able to also run this software under other operating systems (such as variants of MS Windows and Apple OS X), but this is not guaranteed.</p>

Faculty	<p>Bob McKay Rm 302-427 tel. 880 9392</p> <p>To contact me online about the course, please use the moodle system</p>
Teaching Assistant	<p>Dr Dharani Punithan, Mr Hanggjun Cho Rm 302-319/2 tel. 880 1481</p> <p>The teaching assistants can help you with understanding the requirements for the course only. For details about the course content, please contact the faculty.</p>
Classroom	TBA
Time	Monday and Wednesday, 1700 - 1815
Course Requirements	<p>45% - class reading group – all students will be expected to lead readings on specific papers, and to participate in all reading sessions</p> <p>45% - individual project (in general, the standard is that A level work could be published in an international conference, and A+ level work is likely to be publishable (with some additional work) in a good international journal.</p> <p>10% - class participation; the aim of this class is to develop new ideas, which can't happen without participation.</p>
Penalty for Cheating	<p>First offence: negative full marks for components</p> <p>Repeat offence: exclusion from course</p>
References	<p>There is no required textbook for this course. Useful background reading:</p> <p>De Jong's "Evolutionary Computation" Sean Carroll's "Endless Forms Most Beautiful: the New Science of Evo-Devo", David Price, Andrew P. Jarman, John O. Mason, Peter C. Kind "Building Brains: An Introduction to Neural Development"</p> <p>Textbook: none, this course will be based on papers.</p> <p>Materials will be available from the class website</p>
Objectives	Provide a research-level introduction to the hot topic of evolutionary developmental neural networks

Web Site

<https://sc.snu.ac.kr/sclab/doku.php?id=education:aai>