Adam Goode

Contact Information

Adam Goode 1340 Beechview Ave Pittsburgh PA 15126-3344 +1-412-901-6916 a@cmu.edu

Education

- Carnegie Mellon University, Pittsburgh, PA
 Masters of Human-Computer Interaction, August 2003
- Rensselaer Polytechnic Institute, Troy, NY Bachelor of Science in Computer Science and Psychology, May 2001

Research Experience

• Research Programmer. Jeanie Komarek. Auton Lab, Carnegie Mellon University, Pittsburgh, PA. August 2004–present.

Implemented machine learning software in C, C++, Java, and R. Maintained internal build system. Built Auton Lab website.

```
http://www.autonlab.org/
```

• Research Programmer. Jeff Schneider. Auton Lab, Carnegie Mellon University, Pittsburgh, PA. September 2003–August 2004.

Implemented data mining routines, visualization tools, and database utilities for the SmartCube drug discovery project. Processed mouse behavior data and generated reports for PsychoGenics research studies.

```
http://www.autonlab.org/
http://www.rec.ri.cmu.edu/projects/smartcube/
http://www.psychogenics.com/
```

• Research Programmer. John Anderson. ACT-R Research Group, Carnegie Mellon University, Pittsburgh, PA. August 2001–August 2003.

Scheduled and ran fMRI experiments related to cognition and learning, with results leading to several publications. Maintained fMRI data analysis computing systems and programmed fMRI experiments. Worked on a team to develop and maintain the new ACT-R web site.

```
http://act-r.psy.cmu.edu/.
```

- Echo & Narcissus, A Real Time Video Installation. Anat Pollack. Regina Gouger Miller Gallery, Carnegie Mellon University, Pittsburgh, PA. October 2002–April 2003.
 - Worked with the artist to develop and spec the necessary hardware and software for a "simulation of the experience of memory in a post-traumatic state." Designed and coded a sophisticated interactive video capture and playback system. Assisted with installation of piece in gallery. http://www.anatpollack.net/Echo.html
- Elevator Riding with GRACE. Reid Simmons and Illah Nourbakhsh. Carnegie Mellon University, Pittsburgh, PA. AAAI-2002 Robot Challenge, Edmonton, Canada. Summer 2002.
 - Programmed GRACE to locate and ride elevators, contributing to success during the AAAI-2002 Robot Challenge. Built an embedded barometric altimeter for use in vertical localization assist. http://www.palantir.swarthmore.edu/GRACE/
- Tactile and Audio Interfaces. Francine Gemperle and Asim Smailagic. Carnegie Mellon University, Pittsburgh, PA. Summer 2002.
 - Researched issues in 2D audio interface design for immersive audio interfaces. Developed tactile interface editing tool for use in designing tactile icons for wearable computing.
- "The Robot Head Project", Undergraduate Thesis in Psychology. Ronald W. Noel. Rensselaer Polytechnic Institute, Troy, NY. January–May 2001.
 - Refined work on previous robot ears project, created graphical servo control system, and performed preliminary system testing.
- Cognitive Systems Engineering Class Project. Ronald W. Noel. Rensselaer Polytechnic Institute, Troy, NY. September–December 2000.
 - Developed software to control positioning of remote mounted ears based on local tracked head motions.
- Undergraduate Research Project. Mobile Robotics Laboratory, Rensselaer Polytechnic Institute, Troy, NY. Wesley H. Huang. January–May 2000.
 - Worked on Linux device driver development for data acquisition and control equipment, configured lab workstations for student use.

Publications

- Sohn, M.-H., Goode, A., Stenger, V. A, Jung, K.-J., Carter, C. S., & Anderson, J. R. (2005). An information-processing model of three cortical regions: Evidence in episodic memory retrieval. *NeuroImage*, 25(1), 21–33.
- Sohn, M.-H., Goode, A., Koedinger, K. R., Stenger, V. A, Carter, C. S., & Anderson, J. R. (2004). Behavioral equivalence, but not neural equivalence—neural evidence of alternative strategies in mathematical thinking. *Nature Neuroscience*, 7(11), 1193–1194.
- Qin, Y., Carter, C. S., Silk, E., Stenger, V. A., Fissell, K., Goode, A., & Anderson, J. R. (2004). The change of the brain activation patterns as children learn algebra equation solving. *Proceedings of the National Academy of Sciences*, 101(15), 5686–5691.
- Sohn, M.-H., Anderson, J. R., Reder, L. M., & Goode, A. (2004) Differential fan effect and attentional focus. *Psychonomic Bulletin & Review*, 11(4), 729–734.

- Simmons, R., Goldberg, D., Goode, A., Montemerlo, M., Roy, N., Sellner, B., Urmson, C., Schultz, A., Abramson, M., Adams, W., Atrash, A., Bugajska, M., Coblenz, M., MacMahon, M., Perzanowski, D, Horswill, I., Zubek, R., Kortenkamp, D., Wolfe, B., Milam, T., & Maxwell, B. (2003). GRACE: An Autonomous Robot for the AAAI Robot Challenge. *AI Magazine*, 24(2), 51–72.
- Sohn, M.-H., Goode, A., Stenger, V. A., Carter, C. S., & Anderson, J. R. (2003). Competition and representation during memory retrieval: Roles of the prefrontal cortex and the posterior parietal cortex. *Proceedings of the National Academy of Sciences*, 100(12), 7412–7417.
- Qin, Y., Sohn, M.-H., Anderson, J. R., Stenger, V. A., Fissell, K., Goode, A., & Carter, C. S. (2003). Predicting the practice effects on the blood oxygenation level-dependent (BOLD) function of fMRI in a symbolic manipulation task. *Proceedings of the National Academy of Sciences*, 100(8), 4951–4956.

Work Experience

- \rightarrow See the **Research Experience** section for academic work experience.
 - Usability Designer, Mulberry Email Client. Cyrusoft International (now ISAMET), Pittsburgh, PA. January 2003–August 2003.
 - In a team of five students, worked on the Mulberry user interface redesign project to fulfill the final requirements for the HCII Masters degree.
 - http://www.hcii.cs.cmu.edu/M-HCI/2003/mulberry/index.htm
 - Intern. Union Square Technology Group, New York. Summer 1998, 1999, 2000. Co-developed corporate web site, http://www.union-square.com/, created GNU/Linux technology presentation for LawNet 1999.
 - Intern. Barnstorm Video Productions, Meriden, CT. December 1996–August 1997.

 Performed video editing tasks on an ImMIX digital media processor, authored in-house tutorial and reference for the ImMIX system.

Teaching Experience

Undergraduate Teaching Assistantships, Rensselaer Polytechnic Institute

- Software Design and Documentation. David Hollinger. January–April 2001.
 Helped organize course layout, read and graded papers, provided feedback to students on work.
- Data Structures and Algorithms. Adnan Saifee. January–April 2001.
 Worked as in-class lab assistant.
- Data Structures and Algorithms. Paul Bello. January–April 2001. Worked as in-class lab assistant.
- Introduction to Artificial Intelligence. Wesley H. Huang. September–December 2000.
 Developed Perl front-end to online grading system, including poker player testing and ranking pages; assisted students with homework problems.
- Data Structures and Algorithms. Brian Osman. September–December 2000.
 Worked as in-class lab assistant.

- Computer Science I. Paul Bello. September–December 2000.
 Worked as in-class lab assistant.
- Software Design and Documentation. Edwin H. Rogers. January–May 2000.
 Assisted undergraduate students with creation of requirements and design documents, read and commented on papers and drafts.
- Data Structures and Algorithms. Ann Grace. January–May 2000. In-class lab assistant.
- Computer Science I. Toby-John Mills. January–May 2000. In-class lab assistant.
- Data Structures and Algorithms. Aaron Ondek. September–December 1999. In-class lab assistant.
- Computer Science I. Toby-John Mills. September–December 1999. In-class lab assistant.

Honors and Awards

- Rensselaer Medal Scholarship, Rensselaer Polytechnic Institute, 1997–2001
- Bausch and Lomb Medal For Excellence in Science (University of Rochester Scholarship), 1996
- Connecticut Scholar, Choate Rosemary Hall, Summer 1995, Summer 1996