Adobe Systems Incorporated
Advanced Technology Labs

INTERNSHIP OPPORTUNITIES

A summer internship at Adobe Systems Incorporated means the opportunity to work with renowned Computer Graphics Scientists such as…

Martin Newell, creator of the Utah teapot or Newell teapot, a 3D model which has become a standard reference object in the computer graphics community.

Gavin Miller, a pioneer in real-time interaction techniques for multimedia and interactive simulations.

David Salesin, SIGGRAPH 2000 Computer Graphics Achievement Award recipient, whose research interests include, most notably, digital photography and video, automatic design & presentation of information, visualization, image-based rendering, synthetic artistic media, digital typography, and color.

Jim King, one of Adobe's Principal Scientists and currently the PDF Architect.

Interested?

Adobe Systems Incorporated is looking for top undergraduate, Masters, and PhD students to be employed as summer interns in the Advanced Technology Labs. During this internship, the students will have a unique opportunity to be mentored by senior computer scientists and build technology for Adobe products. In addition to the jobs described here, there are also positions working on advanced graphics technologies for Adobe Photoshop, Adobe Illustrator, and Adobe After Effects.

2006 Summer Intern Job Descriptions

Graphics & Vision Research Intern (Requisition No. MS010608) - Seattle

Computers today are used much more for communication than computation. Yet, to date, most of our software for helping people communicate centers on emulating existing physical media, rather than on harnessing the true power and potential of the computer. This internship will focus on research toward using the computer to communicate in new ways. The specific project may be in any number of areas, from new technologies for digital photography or video; to interactive tools for compositing, painting, or illustration; to high-level tools for creating animated presentations; to document layout. The intern should be enrolled in a PhD program in Computer Science and have research experience in computer graphics and/or vision.

Adobe Parallel Graphics Group Intern (Requisition No. MS010607) – San Jose

The intern position in the Adobe Parallel Graphics Group will focus on algorithms targeting multi-core and GPU architectures. Scope includes 2D and 3D rendering, physically-based modeling, including natural phenomena, natural media simulation and simulation-based animation. The candidates should be in a Masters or Ph.D. program in computer graphics. Familiarity with GPU programming is a requirement. The goal of the program is to research and develop new algorithms that push the state-of-the-art of Adobe products. An ideal outcome would be a publication of work developed during the internship.

Portable Directories Intern (Requisition No. MS010606) – San Jose

A portable directory is a normal file within a file system that itself is turned into a file system. That is, we provide software that will use the space provided within a (large) single file to support all the normal file system operations such as creating a subfile, creating a directory, deleting subfiles and directories, and updating any existing subfile. The commonly used ZIP format with an extra layer of optimizing software can provide such a portable directory

implementation. Other solutions are widely available including the product e_Fs by Simple Software Solutions (http://www.simple-sw.com/efsinfo.htm),Windows OLE Structured Storage, and Mac OS X Packages.

The intern on this project will study these and other implementations of portable directories, building a realistic test framework and test cases and compare the various solutions for speed, efficient use of file space, flexibility of software APIs, etc.

Fax Signatures in Acrobat Intern (Requisition No. MS010605) – San Jose

We may have overlooked the simplest kind of signature for an electronic document, which is just a simple graphic presentation of a pen and ink signature. Such signatures have been widely accepted for fax documents, in most states legally binding, and we need to extend the notion to PDF files as well. The student intern will implement a plug-in for Acrobat that will import an image of the user's signature and password protect it within Acrobat for subsequent uses. Further the plug-in will have a trivial interface to allow the user, after entering the password, to place that signature at the appropriate spot on a page of an electronic document. Perhaps most challenging will be the need to accept pictures of the user's signature from digital cameras, including cell phone cameras, and then process them into a form most suitable for Acrobat's use. This will involve making the inked portion black or blue or red (simulating ink on paper), the background transparent, and adjusting the size and resolution to match the typical needs of a signature on paper.

Image Processing & Vision Intern (Requisition No. MS010604) – San Jose

Traditional image processing is based on the relationships between the colors of adjacent pixels in an image. More recent work has achieved some level of success in identifying semantic objects in images, either through more sophisticated analyses of single images to find recognizable structures using learning machines, or through the identification of coherently-moving objects in video. Several projects are underway investigating these approaches. Projects arising out of these investigations include, but are not limited to, extensions of existing automatic red-eye correction techniques to handle pet-eye correction, image correspondence based on extended structures as well as the traditional small regions, and the establishment of a ground truth database for use in image categorization. The ideal intern should be enrolled in a Masters or PhD Computer Science program with an interest and experience in computer vision research.

Apply Now!

To apply for any of the positions above, please apply at our website at www.adobe.com/jobs and enter the job title (or requisition number listed next to each job title). Be sure to register your resume profile online to be alerted as other positions become available that match your interests.

To learn more about Adobe's Intern Program please visit our website at:
http://www.adobe.com/aboutadobe/careeropp/college/internships.html