# The Return of Lost Content: Born-digital Processing of 5.25 Inch Floppy Disks

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**Abstract:** In the Problems in the Permanent Retention of Electronic Records class, taught by Dr. Patricia Galloway at the University of Texas at Austin School of Information, student groups research data retrieval of born-digital legacy media from archival institutions in the Austin area and store retrieved content on a local DSpace installation. During the Spring 2011 semester, a group from this class validated the disk imaging environment on two computers in the School of Information Digital Archeology Lab and created a set of instructions for a digital imaging workflow. Students utilized legacy hardware, a set of Linux commands, and digital forensics tools to capture 5.25 inch floppy disk images. Through the successes and failures of the 5.25 disk imaging process, the group learned about the intricacies of legacy media and processing environments, developed troubleshooting tips and techniques, and benefited from valuable resources in the legacy computing community. These resources include the FC5025 floppy controller, manufactured by Device Side Data, which facilitates 5.25 inch floppy disks to be imaged in a modern computing environment, and the Goodwill Computer Museum, which is building machines that capture information from floppy disks by reading their magnetic flux signals. The goal for this machine is to read any type of floppy disk and assist in error correction, though further research and data analysis is needed. Although much was learned, more areas of research were identified, such as the need for conservation of magnetic media, the difficulties of interoperability and accessing content, and the importance of gaining further understanding of legacy equipment and environments. Legacy media is contained in many archival repositories around the world and archivists are encouraged to establish their own born-digital processing environments to contribute to research in this area.

**About the author:**

*Karen Ballinger* is a recent graduate of the School of Information at the University of Texas at Austin. Her Master of Science in Information Studies focused on digital archiving and records management, merging her background in technology with the preservation of records. She began her study of legacy media in the summer of 2010 with an internship at National Anthropological Archives at the Smithsonian Institution, creating a born-digital processing environment and workflow for the archives. She continued her study of legacy media with Dr. Patricia Galloway's Problems in the Permanent Retention of Electronic Records class at the University of Texas at Austin School of Information. Before completing the master's program, Karen was a systems analyst developing administrative web applications at the University of Texas at Austin, worked in the telecommunications industry, and has a Bachelor of Science in Electrical Engineering from Northwestern University.