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SIAM eBooks

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Abstract

The SIAM eBook Program provides access to a core collection of applied mathematics titles through either a Perpetual Access or Annual Subscription option. Ebook content can be retrieved through individual chapters that are downloadable as PDFs. SIAM does not apply DRM technology to the files making the materials easy for patrons to use. The search tools available on the site are insufficient to provide easy access to content in the collection.

Pricing Options

SIAM provides two primary purchasing options. The first involves a one time, Perpetual Access options which provides purchasers permanent access to the core SIAM ebook collection, consisting of approximately 400 titles. The second option is an Annual Subscription fee which provides access to the core collection any any new publications made available during the year of subscription. Institutions that have previously paid for the perpetual access of the core collection may choose to pay the annual subscription fee in order to continue building their SIAM ebook collection. For 2012, the Perpetual Access fees were set at $11,920 for SIAM Academic and Corporate Members and $14,900 for other organizations. Annual subscriptions range from $1520 for members and $1900 for others. Add on annual subscriptions for institutions that have already purchased the Perpetual Access option are slightly less with $1200 for member organizations and $1500 for other institutions. Pricing options for 2013 are currently available upon request.

Product Description

SIAM, the Society for Industrial and Applied Mathematics, is an international professional organization focused on the intersection of mathematic and computational methodologies used in engineering, industry, and other areas of applied sciences. One component of SIAM's mission is to provide a platform that allows its members to disseminate information and ideas. This goal is primarily accomplished through its publishing activities which include journals, books/ebooks, and conference proceedings.

In January 2011, SIAM expanded their ebook program to allow institutions to access the collection through either purchase or subscription.[1] The initial collection consisted of approximately 400 titles from 14 different book series. Although some authors prefer to not release their work in electronic format, the majority of book titles published by SIAM during their history are included in this collection. Additionally, SIAM states that they publish 15 to 20 new titles each year. Some of the 37 subject areas covered in the collection include: applied geometry, biological sciences, chemical kinetics, communication theory, computational mathematics, data mining and information retrieval, environmental sciences, fluid mechanics, linear algebra and matrix theory, materials sciences, partial differential equations, and statistics.

Users may browse for ebooks by subject, series, or title. A simple search tool is also provided on the site and can be limited to books only. The search tool provides keyword, citation, DOI/ISSN, and Advanced Search options. Once a title has been selected, the record page provides basic bibliographic details including title, author, abstract, DOI and a link to the related book series. The content of each book is separated into individual chapters which may be downloaded as PDF files. There is no option for downloading a complete book as a single file. In addition to the book having a specific DOI, each chapter has an individual DOI which may be used to retrieve that specific section.

The books are published using the Atypon's Literatum platform and are disseminated as PDF files that can be accessed on either a computer or mobile device. Unlike most ebook collections, SIAM does not restrict use of the titles by applying DRM restrictions. As a result, ebook chapters may be downloaded by patrons and used for as long as they wish without worrying that a loan period will expire or the file will automatically delete itself from the computer or device.

Critical Evaluation

SIAM books cover an important area of the math discipline, the application of mathematics to other areas of science and industry. As an established, international mathematical association, SIAM specializes in producing content in this critical area and has editorial staff that are familiar with mathematical notations and concepts. The interdisciplinary nature of the collection's content will be valuable mathematicians, researchers working in other fields, and faculty and student enrolled in STEM programs.

SIAM ebooks are also available in print format. Since institutions were only able to purchase ebooks beginning in 2011, libraries may find that many of the titles may be duplications of materials in their existing library collections. However, the ebook format provides several advantages that should be considered. One of the most significant strengths of the SIAM ebook collection is that multiple users can access the same title at the same time. For example, reference and instruction titles such as the *Handbook of Writing for the Mathematical Sciences* or *Learning LaTeX* are much more usable for patrons when they can access them at the point of need without having to wait for another patron to turn in the book.

In today's world of omnipresent DRM restrictions, it is pleasantly surprising to discover that SIAM does not apply DRM technology to their ebooks. The organization retains the copyrights for all its titles and does not permit any unauthorized copying. However, the absence of DRM applications make it much easier for researchers to take full advantage of the collection. In a field that is receptive to openly accessible content[2] and where written materials may require additional concentration and time to absorb the concepts, not having to monitor loan periods or deal with expired licenses makes the collection very usable. Additionally, this delivery approach allows researchers to transfer chapters between devices. In today's mobile research environment, portability is an important factor for patrons.

As previously mentioned, the site provides both browse and search options for locating and accessing a specific title. The default search options include keyword, citation, and DOI/ISSN searches. These searches can be limited to just books or journals. The Advanced Search option provides additional ways to limit or control a search. Specific search fields include: Anywhere, Authors, Title, Abstract, Keyword, Affiliations. Additional search terms can be added as needed.

Although the Advance Search does provide more control and specificity to a user's search, results can be confusing. Since the Advanced Search does not provide the option to limit results to just books or articles, materials from all SIAM publications, including journal articles, will display in the results list. Additionally content for the books is treated as individual chapters. Consequently matches from a particular book are displayed in the results list as individual chapters making it difficult to retrieve a single, specific book using the search tool.

SIAM also provides browse options. From the homepage, users can access a browse tool which allows them to peruse a list of titles by subject or alphabetically by title. The homepage also provides a complete list of the 37 available subjects. These hyperlinked terms also display on the results list and on the individual book and chapter pages.

One feature that is particularly lacking is the ability to search within a single title. Although it is possible to use the available search tool to find materials that contain a particular term. There is no way to navigate to a specific ebook and then search within the contents. With each chapter a separate PDF file, it makes it difficult to find needed sections within a single book.

Another useful feature of the SIAM ebook program is that they make MARC records available for libraries to load into their local catalog. This option allows patrons to use the discovery and search tools already built into the catalog to find whole books from the SIAM collection. Currently the MARC records are available for download on the SIAM ebook program site.

Contract Provisions

SIAM provides a standard contract that can be viewed before purchasing the collection. Authorized users of the collection include affiliated employees, faculty, staff, students, and patrons at remote sites that are under the control of the institution. Patrons who periodically visit the library may also use the collection through stations located in the library. Using existing Interlibrary Loan services, such as Ariel or ILLIAD, subscribers may also provide another library one copy of an individual document.

The contract also specifies the timeframe in which access to the collection is available. For the Annual Subscription option, access is available through the calendar year in which the contract took effect. For institutions purchasing the Perpetual Access option, access to the initial collection is available in perpetuity. Additionally, access to titles published during the year the Perpetual Access option is purchased, will also be available.

Authentication

Authentication is IP validated.

References

1. "SIAM Launches e-book Program," last modified October 14, 2010, http://www.siam.org/about/news-siam.php?id=1802.

2. Fowler, Kristine, "Mathematicians' Views on Current Publishing Issues: A Survey of Researchers," Issues in Science and Technology Librarianship 67 (2011), accessed April 24, 2012, doi: 10.5062/F4QN64NM.

About the Author

Michelle Armstrong has a Bachelor of Science in Special Education and a Master of Library Science. Before coming to Boise State, she served as the Coordinator of Information Services for the Wyoming Institute for Disabilities, University of Wyoming. Since the fall of 2008, Ms. Armstrong has been the Scholarly Communications Librarian for Albertsons Library at Boise State University. In addition to overseeing the institutional repository, she serves as the Library Liaison for the Department of Mathematics.