Selected List of Books, Journals, CDs, Theses, Conferences and Internet Resources on

Biometrics: face or finger recognition, computer graphics, computer vision, digital image processing, digital watermarking, image analysis, processing & understanding, pattern recognition and video compression

Compiled

By

Resource Centre
Books, Journals, CDs, Theses, Conferences, and Internet Resources on Biometrics: face or finger recognition, computer graphics, computer vision, digital image processing, digital watermarking, image analysis, processing & understanding, pattern recognition and video compression

I  Books on Biometrics: Face or Finger Recognition (Available in the RC)

1. Jain, Anil; Bolle, Ruud and Pankanti, Sharath
   **Biometrics: personal identification in networked society.**
   006.4 ANI
   008758

2. Li, Stan Z. (Ed.) and Jain, Anil K. (Ed.)
   **Handbook of face recognition.**
   006.42 LI,
   012859

3. Maltoni, Davide (Ed.) and Jain. Anil K. (Ed.)
   **Biometric authentication : ECCV 2004 International Workshop, BioAW 2004, Prague, Czech Republic, May 15th, 2004; proceedings.**
   004 MAL
   011936

4. Nanavati, Samir; Thieme, Michael and Nanavati, Raj
   **Biometrics: Identity verification in a networked world.**
   570.15195 NAN
   005231

5. Wayman, James (Ed.); Jain, Anil (Ed.) and Maltoni, Davide (Ed.)
   006.4 WAY
   012072

6. Woodward, John D.; Orlans, Nicholas M. and Higgins, Peter
   **Biometrics: Identity assurance in the information age.**
   006.422 WOO
   008513

7. Zhang, David D.
   **Biometric solutions for authentication in an e-world.**
   621.38928 ZHA
   008681

II  Books on Computer Graphics (Available in the RC)

1. Agoston, Max K.
   **Computer graphics and geometric modelling: implementation and algorithms.**
   006.6 AGO
   012387

2. Buss, Samuel R.
   **3D computer graphics: a mathematical introduction with OpenGL.**
   006.693 BUS
   009415
<table>
<thead>
<tr>
<th></th>
<th>Author(s)</th>
<th>Title</th>
<th>Edition</th>
<th>Publisher</th>
<th>Location</th>
<th>Call Numbers</th>
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<tr>
<td></td>
<td>Authors</td>
<td>Title</td>
<td>Edition</td>
<td>Publisher</td>
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<tr>
<td>15.</td>
<td>Shirley, Peter</td>
<td><strong>Fundamentals of computer graphics.</strong></td>
<td></td>
<td>Natic: A K Peters, 2002</td>
<td>006.6 SHI</td>
<td>008692</td>
</tr>
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</table>

### III Books on Computer Vision (Available in the RC)

<table>
<thead>
<tr>
<th></th>
<th>Authors</th>
<th>Title</th>
<th>Location</th>
<th>ISBN</th>
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<tbody>
<tr>
<td>1</td>
<td>Casasent, David P. (Ed.); Hall, Ernest L. (Ed.) and Roning, Juha (Ed.)</td>
<td><strong>Intelligent robots and computer vision XXI: algorithms, techniques and active vision.</strong></td>
<td>USA: SPIE-The International Society for Optical Engineering, 2003</td>
<td>629.892 CAS 008615</td>
</tr>
<tr>
<td>3</td>
<td>Forsyth, David A. &amp; Ponce, Jean</td>
<td><strong>Computer vision: A modern approach.</strong></td>
<td>Delhi: Pearson Education, 2003</td>
<td>006.37 FOR 007325</td>
</tr>
<tr>
<td>4</td>
<td>Hartley, Richard &amp; Zisserman, Andrew</td>
<td><strong>Multiple view geometry in computer vision. (2nd Ed.)</strong></td>
<td>Cambridge: Cambridge University Press, 2003</td>
<td>006.37 HAR 010320</td>
</tr>
<tr>
<td>5</td>
<td>Majumdar, Kantilal &amp; Jain, Anil</td>
<td><strong>ICVGIP 2002: proceedings third Indian conference on computer vision, graphics and image processing.</strong></td>
<td>New Delhi: Allied Publishers, 2002</td>
<td>006.37 MAJ 012346</td>
</tr>
<tr>
<td>6</td>
<td>Sebe, Nicu (Ed.); Lew, Michael S. (Ed.) and Huang, Thomas S. (Ed.)</td>
<td><strong>Computer vision in human-computer interaction.</strong></td>
<td>Berlin: Springer-Verlag, 2004</td>
<td>004 SEB 010946</td>
</tr>
</tbody>
</table>
### Books on Digital Image Processing (Available in the RC)

1. **Castleman, Kenneth R.**  
   *Digital image processing.*  
   621.381542 CAS  
   009942

2. **Chanda, Bhabatosh and Majumder, Dwijesh Dutta**  
   *Digital image processing and analysis.*  
   621.367 CHA  
   007567, 012806

3. **Efford, Nick**  
   *Digital Image Processing.*  
   621.367 EFF  
   00744

4. **Gonzalez, Rafael C. and Woods, Richard E.**  
   *Digital image processing. (1st & 2nd Ed.)*  
   621.367 GON  
   000123, 000124, 000741, 006501, 006502, 008483

5. **Gonzalez, Rafael C.; Woods, Richard E. and Eddins, Steven L.**  
   *Digital image processing using MATLAB.*  
   621.367 GON  
   010410

6. **Jahne, Bernd**  
   *Digital image processing.*  
   621.382 JAH  
   004377

7. **Jain, Anil K.**  
   *Fundamentals of digital image processing.*  
   621.367 JAI  
   008213-008215, 009097

8. **Pratt, William K.**  
   *Digital image processing.*  
   621.367 PRA  
   004134, 008211, 008212

### Books on Digital Watermarking (Available in the RC)

1. **Arnold, Michael**  
   *Techniques and applications of digital watermarking and content protection.*  
   005.8 ARN  
   007430

2. **Kalker, Ton (Ed.); Cox, Ingemar J. (Ed.) and Ro, Yong Man (Ed.)**  
   004 KAL 009651
### Books on Image Analysis, Processing and Understanding (Available in the RC)

1. Aizawa, Kiyoharu (Ed.); Sakaue, Katsuhiko (Ed.) and Suenaga, Yasuhito (Ed.)
   **Image processing technologies: algorithms, sensors, and applications.**
   621.3994 AIZ
   011218

2. Aubert, Gilles and Kornprobst, Pierre
   **Mathematical problems in image processing: partial differential equations and the calculus of variations.**
   621.3670151 AUB
   011955

   **Nonlinear signal and image processing: theory, methods and applications.**
   621.3822 BAR 012076

4. Bose, Tamal
   **Digital signal and image processing.**
   621.3 BOS 009445

5. Cichocki, Andrzej and Amari, Shun-ichi
   **Adaptive blind signal and Image processing: learning algorithms and applications.**
   621.3822 CIC
   009402

6. Crane, Randy
   **Simplified approach to image processing.**
   621.36702855133 CRA
   005523

7. Dougherty, Edward R. and Astola, Jaakko T.
   **Nonlinear filters for image processing.**
   621.367 DOU
   013019

8. Jahne, Bernd
   **Practical handbook of image processing for scientific and technical applications. (2nd Ed.)**
   621.367 JAH 011063

   **Digital image analysis.**
   621.367 KRO
   005675
<table>
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<tr>
<th>No.</th>
<th>Author(s)</th>
<th>Title and Subtitle</th>
<th>Publisher and Year</th>
<th>Catalogue Number</th>
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</thead>
</table>
**VII Books on Pattern Recognition (Available in the RC)**

1. Bhanu, Bir, Lin, Yingqiang and Krawiec, Krzysztof  
   *Evolutionary synthesis of pattern recognition systems.*  
   006.4 BHA  
   013376

2. Bishop, Christopher M.  
   *Neural networks for pattern recognition.*  
   006.4 BIS 008538

3. Brun, Luc (Ed.) and Vento, Mario (Ed.)  
   *Graph-based representations in pattern recognition: 5th iapr International workshop, gbpr 2005, poitiers, France, April 11-13, 2005; proceedings.*  
   006.4 BRU  
   012549

   *Handbook of pattern recognition and computer vision.*  
   006.4 CHE  
   012776

5. Gose, Earl; Johnsonbaugh, Richard and Jost, Steve  
   *Pattern Recognition and Image Analysis.*  
   006.42 GOS 003226

6. Lu, Hanqing (Ed.) and Zhang, Tianxu (Ed.)  
   006.42 LU 008819

7. Marques, Jorge S. (Ed.); Blanca, Nicolas Perez de la (Ed.) and Pina, Pedro (Ed.)  
   *Pattern recognition and image analysis: second iberian conference, IBPRIA 2005, Estoril, Portugal, June 7-9, 2005, proceedings, part I.*  
   006.42 MAR  
   013389

8. Meyer-Baese, Anke  
   *Pattern recognition in medical imaging.*  
   006.312 MEY  
   011119

9. Pal, Sankar K. and Mitra, Pabitra  
   *Pattern recognition algorithms for data mining.*  
   006.312 PAL  
   011942
<table>
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<tr>
<th></th>
<th>Author</th>
<th>Title</th>
<th>Publisher</th>
<th>Year</th>
<th>ISBN</th>
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### VIII Books on Video Compression (Available in the RC)

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<th>Author</th>
<th>Title</th>
<th>Publisher</th>
<th>Year</th>
<th>ISBN</th>
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### IX CDs (Available in the RC)

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<th></th>
<th>Author</th>
<th>Title</th>
<th>Publisher</th>
<th>Year</th>
<th>ISBN</th>
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<tbody>
<tr>
<td>2</td>
<td>Bhatt, Krutarth</td>
<td>Multiple watermarking schemes for copyright protection.</td>
<td>Gandhinagar: Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), 2005.</td>
<td>2005</td>
<td>005.8 BHA C01084</td>
</tr>
</tbody>
</table>
| 4. | Cichocki, Andrzej and Amari, Shun-ichi | **Adaptive blind signal and Image processing: learning algorithms and applications.**
|    |                                       | 621.3822 CIC
|    |                                       | C00831

| 5. | Efford, Nick | **Digital image processing.**
|    |           | 621.367 EFF
|    |           | C00068, C00744

| 6. | Effelsberg, Wolfgang and Steinmetz, Ralf | **Video Compression Techniques.**
|    |                                            | 621.388 EFF
|    |                                            | C00537

| 7. | Jahne, Bernd | **Digital image processing.**
|    |             | 621.382 JAH
|    |             | C00470

| 8. | Kropatsch, Walter G. (Ed.) and Bischof, Horst | **Digital image analysis.**
|    |                                                | 621.367 KRO
|    |                                                | C00643

|    |                                    | 006.6 POK
|    |                                    | C00578

| 10. | Pratt, William K. | **Digital image processing.**
|     |                   | 621.367 PRA
|     |                   | C00755, C00756, C00376

| 11. | Suryanarayana, P. V. | **Automatic car license plate recognition.**
|     |                       | Gandhinagar: Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), 2005.
|     |                       | 621.3678 SUR
|     |                       | C01073

| 12. | Symesd, Peter | **Digital video compression.**
|     |                  | 621.38833 SYM
|     |                  | C00813

| 13. | Winkler, Gerhard | **Image analysis, random fields and Markov chain Monte Carlo methods: a mathematical introduction.**
|     |                       | 621.367015192 FRI
|     |                       | C00828
X  Thesis (Available in the RC)

1. Athale, Suprita  
**Fractal based approach for face recognition.**  
006.4 ATH  
T00026

2. Bhatt, Krutarth  
**Multiple watermarking schemes for copyright protection.**  
Gandhinagar: Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), 2005.  
005.8 BHA  
T00057

3. Bhandari, Kunal  
**Hybrid approach to digital image watermarking using singular value decomposition and spread spectrum.**  
Gandhinagar: Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), 2005.  
005.8 BHA  
T00042

4. Suryanarayana, P. V.  
**Automatic car license plate recognition.**  
Gandhinagar: Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), 2005.  
621.3678 SUR  
T00046

5. Tatu, Aditya  
**Differential geometry and image processing.**  
Gandhinagar: Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), 2005.  
621.367 TAT  
T00049

XI  Journals (Available in the RC)

1. ACM SIGGRAPH Computer Graphics  
0097-8930  
[http://www.acm.org/siggraph/](http://www.acm.org/siggraph/)

2. ACM Transactions on Multimedia Computing, Communications, and Applications (TOMCCAP):  
1551-6857  

3. Computer Vision and Image Understanding (3/Y)  
Elsevier Science California, US.  
ISSN: 1077-3142

4. IEE Proceedings I Communications, Speech and Vision  
0956-3776  

5. IEE Proceedings I Communications, Speech and Vision  
0143-7100  

1350-245X  
| 20. | Pattern Recognition Letters (16/Y) | | Elsevier Science, Amsterdam, NL ISSN: 0167-8655 |
XII Conferences


   http://www.springerlink.com/link.asp?id=h77612337988

   http://www.springerlink.com/link.asp?id=m84466j14436

   http://ieeexplore.ieee.org/servlet/opac?punumber=3814

   http://www.springerlink.com/link.asp?id=jwg447nv1056

   http://www.springerlink.com/link.asp?id=r32p26880506

   http://ieeexplore.ieee.org/servlet/opac?punumber=7973

   http://www.springerlink.com/link.asp?id=fkJmufJa7ncc

   http://www.springerlink.com/link.asp?id=5hv1l25x9q46


    http://ieeexplore.ieee.org/servlet/opac?punumber=4050

    http://ieeexplore.ieee.org/servlet/opac?punumber=3232


    http://ieeexplore.ieee.org/servlet/opac?punumber=5665


    http://ieeexplore.ieee.org/servlet/opac?punumber=7752

    http://ieeexplore.ieee.org/servlet/opac?punumber=7966

    http://ieeexplore.ieee.org/servlet/opac?punumber=9799

    http://ieeexplore.ieee.org/servlet/opac?punumber=988

    http://ieeexplore.ieee.org/servlet/opac?punumber=4606

    http://ieeexplore.ieee.org/servlet/opac?punumber=7403

    http://ieeexplore.ieee.org/servlet/opac?punumber=4949
### XIII Internet Resources

1. **Bob Fisher's Personal Page**  
   Robert Fisher is a Professor in the School of Informatics at the University of Edinburgh, conducting research in the Machine Vision Unit. His home page provides information about his research interests and publications, many of which are available to read in PDF, PostScript or HTML.  

2. **Brown University Computer Graphics Group**  
   The Brown University Graphics Group provides access to publications and conference papers written by group members. Publications can be viewed by author and there is also a link to peruse the university's entire computer science department's list of publications.  

3. **Computer Graphics and Visualization at the University of Utah School of Computing**  
   This web site provides an overview of research undertaken by the computer graphics and visualisation group. This includes details of faculty, projects, and publications.  
   [http://www.cs.utah.edu/research/areas/graphics/](http://www.cs.utah.edu/research/areas/graphics/)

4. **Computer Graphics Group at the Laboratory for Computer Science at Massachusetts Institute of Technology**  
   Details of current projects and links to publications by staff members are available from this computer graphics related research group at MIT. Staff pages hold further information about their research interests and teaching activities.  
   [http://groups.csail.mit.edu/graphics/](http://groups.csail.mit.edu/graphics/)

5. **Computer Graphics Laboratory, ETH Zürich**  
   Details provided here of current research at the Computer Graphics Laboratory includes links to project pages and information about staff members. Publications including papers, tutorials, exercises, lecture slides, and dissertations are also available.  
   [http://graphics.ethz.ch/](http://graphics.ethz.ch/)

6. **Computer Graphics Research Group in the Department of Computer Science at the University of Sheffield**  
   Details of research projects, teaching modules, proposed undergraduate dissertations and PhD projects, and information about staff is provided by this research group working in the field of computer graphics. Some online papers, a listing of staff publications, a gallery of images, and links to various related online resources are also available.  
   [http://www.dcs.shef.ac.uk/graphics/](http://www.dcs.shef.ac.uk/graphics/)

7. **Computer Vision and Neural Computing Group at the University of Cambridge**  
   Lecture notes, learning guides, worked examples, and past exam questions are provided on this site. These are taken from the courses taught by Group, which include neural computing, computer vision, information theory and coding, continuous mathematics, and artificial intelligence. Some publications from staff pages are available.  
   [http://www.cl.cam.ac.uk/Research/CVCNG/](http://www.cl.cam.ac.uk/Research/CVCNG/)

8. **Computer Vision Conferences**  
   A listing of vision conferences produced by the Computer Vision Group at the University of Southern California.  

9. **Computer Vision Homepage at Carnegie Mellon University**  
   The computer vision homepage at the Carnegie Mellon School of Computer Science is a collection of links to resources relevant to computer vision and image processing.  
<table>
<thead>
<tr>
<th>10. <strong>Computing Research Repository</strong></th>
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<tbody>
<tr>
<td>The Computing Research Repository (CoRR) is sponsored by ACM, the ArXiv.org e-Print archive, NCSTRL (Networked Computer Science Technical Reference Library) and AAAI (American Association for Artificial Intelligence). Subjects covered include artificial intelligence, computational science, engineering, and finance, computer vision and pattern recognition, robotics, and many others.</td>
</tr>
<tr>
<td><a href="http://xxx.soton.ac.uk/archive/cs/intro.html">http://xxx.soton.ac.uk/archive/cs/intro.html</a></td>
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<th>11. <strong>Digital Video Compression</strong></th>
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<tr>
<td>Sections include information on the applications of digital video (DV), characteristics of DV, matching criteria, and general purpose compression techniques.</td>
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<th>12. <strong>EUROGRAPHICS Association</strong></th>
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<tr>
<td>EG. Details of conferences and workshops, services, and publications from this Europe-wide professional computer graphics association are provided here.</td>
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<td><a href="http://www.eg.org/">http://www.eg.org/</a></td>
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<th>13. <strong>Image Analysis and Computer Graphics at the Technical University of Denmark</strong></th>
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<tr>
<td>Information about people, research, publications, and teaching can be found on this website along with a calendar of events. Research includes remote sensing, medical imaging, surface measurements, biotechnology and computer graphics. Publications are divided into journal articles, books, conference papers, technical reports, Theses and MSc theses, listed by year.</td>
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<th>14. <strong>Image Analysis Research Laboratory at the University of South Florida</strong></th>
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<td><a href="http://marathon.csee.usf.edu/">http://marathon.csee.usf.edu/</a></td>
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<tr>
<th>15. <strong>Image Processing and Analysis Group</strong></th>
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<td><a href="http://noodle.med.yale.edu/">http://noodle.med.yale.edu/</a></td>
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<tr>
<th>16. <strong>Image Processing Toolbox 5.1</strong></th>
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<td>The Image Processing Toolbox provides a comprehensive set of reference-standard algorithms and graphical tools for image processing, analysis, visualization, and algorithm development.</td>
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<th>17. <strong>Information Retrieval Group in the Department of Computing Science at the University of Glasgow</strong></th>
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<tr>
<td>This site offers a list of publications, project information, past seminar slides, test collections, and news of events relating to this group's research themes. Areas of interest include theoretical modeling of the retrieval process, interactive IR systems, and user-oriented evaluation of image retrieval systems.</td>
</tr>
<tr>
<td><a href="http://ir.dcs.gla.ac.uk/">http://ir.dcs.gla.ac.uk/</a></td>
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<tr>
<th>18. <strong>International Conference on Image Processing 1994</strong></th>
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<tr>
<td><a href="http://campus.acm.org/public/search/results.cfm">http://campus.acm.org/public/search/results.cfm</a></td>
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<th>19. <strong>International Conference on Image Processing 1995</strong></th>
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<th>20. <strong>International Conferences in Central Europe on Computer Graphics, Visualization and Computer Vision</strong></th>
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<tr>
<td>Short papers, posters, and full conference proceedings are available from the series of conferences in computer graphics. The digital library includes the Journal of WSCG, and details of forthcoming conferences and keynote speakers are included.</td>
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<tr>
<th>21. <strong>Pattern Recognition and Fuzzy Systems at the University of Wales, Bangor</strong></th>
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<tr>
<td>The Pattern Recognition &amp; Fuzzy Systems research group at the University of Wales, Bangor, provides details of researchers, collaborators and an explanation of their interests on their Website.</td>
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<tr>
<th>22. <strong>Signal and Image Processing Group at the University of Bath</strong></th>
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<tr>
<td>This university research group webpage covers video signal processing. It includes papers in PDF format.</td>
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<tr>
<td><a href="http://www.bath.ac.uk/elec-eng/pages/sipg/">http://www.bath.ac.uk/elec-eng/pages/sipg/</a></td>
</tr>
</tbody>
</table>
23. **The British Machine Vision Association and Society for Pattern Recognition**  
The BMVA provides a national forum for individuals and organisations involved in machine vision, image processing, and pattern recognition in the UK. It aims to promote knowledge of machine vision and pattern recognition, encourage practical applications of the technology, facilitate the rapid transfer of research results to industry and also represent the UK machine vision community, nationally and internationally.  
[http://www.bmva.ac.uk/](http://www.bmva.ac.uk/)

The Vector Math for 3D Computer Graphics is an interactive tutorial on vector algebra and matrix algebra from the viewpoint of computer graphics. It is part of the Computer Aided Instruction Project at the Central Connecticut State University's Computer Science Department.  
[http://chortle.ccsu.edu/VectorLessons/vectorIndex.html](http://chortle.ccsu.edu/VectorLessons/vectorIndex.html)