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# ATEF Z. ELSHERBENI

IEEE Fellow (2007) and ACES Fellow (2008)

# **Developed Software Packages: (Total 17 Packages)**

### 2023

- Rachel Lumnitzer and Atef Z. Elsherbeni, "Electromagnetic Visualization Tools for Effective Undergraduate Education," International Applied Computational Electromagnetics Society (ACES) Symposium, Monterey, CA, 2023.
- Zahid Hassan and Atef Z. Elsherbeni, "Visualization of Electric and Magnetic Fields Inside Circular and Baffle Waveguides and Cavities," International Applied Computational Electromagnetics Society (ACES) Symposium, Monterey, CA, 2023.

#### 2006

- V. Demir, and A. Z. Elsherbeni, "A Graphical User Interface for calculation of reflection and transmission coefficients of a layered medium," IEEE Antennas and Propagation Magazine.
- V. Demir, M. H. Al Sharkawy, and A. Z. Elsherbeni, "A Graphical User Interface (GUI) for two-dimensional electromagnetic scattering problems," *IEEE SoutheastCon Conference*, Memphis, TN, USA, March 31 April 2, 2006.

### 2005

Mohamed Al Sharkawy, Veysel Demir, and Atef Z. Elsherbeni, "Educational Software Package for Electromagnetic Scattering from Simple Two and Three Dimensional Canonical and Non-Canonical Objects," *IEEE/ACES International Conference on Wireless Communications and Applied Computational Electromagnetics*, Honolulu, Hawaii, April 3 – 7, 2005.

### 2004

• V. Demir, A. Z. Elsherbeni, D. Worasawate, and E. Arvas, "A graphical user interface (GUI) for plane wave scattering from a conducting, dielectric or a chiral sphere," *IEEE Antennas and Propagation Magazine*, vol. 46, No. 5, pp. 94-99, October 2004.

### 2003

• Atef Z. Elsherbeni, Matthew J. Inman, "Antenna Design and Radiation Pattern Visualization" *Journal of the Applied Computational Electromagnetics Society (ACES)*, vol. 18, no. 4, 2003.

### 2001

• Allen W. Glisson, and Atef Z. Elsherbeni, 2D-TE Finite Difference Time Domain Visualization; (version 1). The Applied Computational Electromagnetic Society Web Site, March 2001.

## 2000

- Allen W. Glisson, and Atef Z. Elsherbeni, 1D Matlab Finite Difference Time Domain Code; (version 1). The Applied Computational Electromagnetic Society Web Site, March 2000.
- Allen W. Glisson, and Atef Z. Elsherbeni, 2D-TM Finite Difference Time Domain Visualization; (version 1). The Applied Computational Electromagnetic Society Web Site, March 2000.

# 1996

• Atef Z. Elsherbeni and C. D. Taylor, "Antenna Pattern Plotter," version 1.3, published in the second edition of the Antenna Theory Analysis and Design Book by C. A. Balanis, 1996.

### 1005

- Atef Z. Elsherbeni and C. D. Taylor, Jr., WGC: Electromagnetic Fields inside Waveguides and Cavities; (version 2.1). Software Book II, Center on Computer Applications for Electromagnetic Education (CAEME), Ch. 15, 1995.
- Atef Z. Elsherbeni and C. D. Taylor, Jr., Interactive Visualization of Two- and Three-Dimensional Antenna Patterns. Software, Book II, Center on Computer Applications for Electromagnetic Education (CAEME), Sec. 4, Ch.8, 1995.
- Atef Z. Elsherbeni and Patrick Ginn, Arrays: Interactive Analysis of Antenna Arrays. Version 2 published in the Software, Book II, Center on Computer Applications for Electromagnetics Education (CAEME), Ch. 7, 1995.





# 1993

Atef Z. Elsherbeni and C.D. Taylor, Jr., CCM: Efficient Algorithm for The Scattering from Composite Two-Dimensional Scatterers Using Personal Computers: Version 1, published in the IEEE Antennas and Propagation Magazine, EM Programmer's Notebook, vol. 35, no. 5, pp. 68-70, October, 1993.

## 1992

Atef Z. Elsherbeni and Patrick Ginn, Arrays: Interactive Analysis of Antenna Arrays. Version 1 published in the Computer Applications in Engineering Education Journal (CAE), vol. 1, no. 1, pp. 109-117, 1992.

#### 1991

 Atef Z. Elsherbeni, D. Kajfez and J. Hawes, WGVMAP: Mapping of Vector Fields inside Waveguides. Version 1, published in the Software, Book I, Center on Computer Applications for Electromagnetics Education (CAEME), Ch. 10, 1991.

