

**Chadia Affane Aji, Professor
Mathematics
College of Arts and Sciences
Publications and Presentations**

BOOKS

- **Affane Aji**, Bales, Karatas, Talibi: Fundamentals of Algebra. Published by Empire Science Resources, ISBN 978-0-982749-2-7, LLC 2014
- Said Elnashaie, Frank Uhlig, **Chadia Affane**: Numerical Techniques for Chemical and Biological Engineers Using MATLAB: A Simple Bifurcation Approach. Published by Springer, 2006

BOOK CHAPTER

- **Chadia Affane-Aji** and N. K. Govil, On the Regions Containing All the Zeros of a Polynomial, P.M. Pardalos et al. (eds.), Nonlinear Analysis, Springer Optimization and Its Applications 68, DOI 10.1007/978-1-4614-3498-6_3, Springer Science+Business Media, LLC 2012

REFEREED JOURNAL PUBLICATIONS

- Chadia Affane **Aji**, M. Javed Khan, Virtual to reality: Teaching Mathematics and Aerospace Concepts to Undergraduates Using Unmanned Aerial Systems and Flight Simulation Software, under print in **Journal** of College of Teaching and Learning, 2015
- James Holt, Saad Biaz, Levent Yilmaz, and C Affane Aji, "A Symbiotic Simulation Architecture for Evaluating UAVs Collision Avoidance Techniques," Journal of Simulation, Palgrave MacMillian, Volume 8, Issue 1, 2014
- Chadia Affane Aji, Laurretta Garrett, & Saad Biaz, "The Integration of Scilab into College Calculus," *Alabama Journal of Mathematics*, 37, 2013
<http://ajmonline.org/2013/scilab.php>
- James Holt, Saad Biaz, and Chadia Affane Aji, "Comparison of UAS Collision Avoidance Algorithms in a Simulated Environment," Journal of Guidance, Control, and Dynamics, Editor: the American Institute of Aeronautics and Astronautics (AIAA), Volume 36, Issue 3, 2013
- C. Affane-Aji, N. K. Govil, "On the Region Containing All the Zeros of a Polynomial," *Nonlinear Analysis: Stability, Approximation and Inequalities*, Edited by P.G. Georgiev, P. Pardalos, and H.M.Srivastava, Springer Optimization and Its Applications 68 (2012) 39-55
- C. Affane-Aji, S. Biaz, N. K. Govil, "On Annuli Containing All the Zeros of a Polynomial," *Mathematical and Computer Modeling* 52 (2010) 1532-1537
- C. Affane Aji, H. Elalaoui-Talibi, "A Partitioning Algorithm for Computing Limiting Distributions of Ill-Conditioned Markov Chains," *Advances and Applications Statistical Sciences*, No. 2, (2010) 511-519

- C. Affane, Saad Biaz, S. Elnashai, F. Uhlig, “A Geometric Level Set Method for Transcendental Equations from Chemical Engineering,” the *Alabama Journal of Mathematics*, Spring/Fall (2009) 1-7
- C. Affane-Aji, N. Agarwal, N. K. Govil, “Location of Zeros of Polynomials,” *Mathematical and Computer Modeling* 50 (2009) 306-313

REFEREED CONFERENCE AND PROCEEDINGS PUBLICATIONS

- C. A. Aji and M. J. Khan, Virtual To Reality: Teaching Mathematics And Aerospace Concepts To Undergraduates Using Unmanned Aerial Systems And Flight Simulation Software, accepted for publication in the **conference proceedings** of the *2015 International Education Conference in Maui*
- M. J. Khan and C. A. Aji, An Investigation Of Spatial Visualization Skills Of Minority Students, accepted for publication in the **conference proceedings** of the *2015 International Education Conference in Maui*, **Best paper award**
- C. Affane Aji, M. J. Khan, “Using a UAV to Teach Undergraduates Math and Aircraft Performance,” **Proceedings** of the American Society for Engineering Education (ASEE), 2013
- Khan, M. J., Affane Aji, C., Rossi, M., and Heath, B., “Teaching of Math and Physics Using a Flight Simulator,” Proceedings ASEE SE Conference, April, 2012
- Khan, M. J., Rossi, M., and Aji, C. A. (2012). “The Development and Implementation of a Flight Simulation Based Environment for Teaching Math & Science”, Proceedings of the Society for Information Technology in Education (SITE) Conference, Austin, TX, 5-9 March, 2012
- Khan, M. J., Aji, C. A., and Rossi, M. (2012), “Integrating a flight simulation environment in the classroom to teach math and science”, Poster, International Society of Technology in Education, 24 - 27 June 2012, San Diego, CA
- G. Rochon, C. El Amrani, T. Rachidi, G. Altay, T. El Ghazawi, O. Ersoy, J. Quansah, S. Fall, C. A. Aji, G. S. El Afandi, "Real-Time Remote Sensing for Disaster Life Cycle Management: The Mediterranean Dialogue Earth Observatory (MDEO)", *African Association of Remote Sensing of the Environment (AARSE), 9th International Conference*, El Jadida, Morocco, October 29-November 02, 2012
- M. J. Khan, Affane Aji C., M. Rossi, and B. Heath, Teaching of Math and Physics Using a Flight Simulator, American Society for Engineering Education (ASEE) Southeast Section **Conference**, 2012
- M. J. Khan, Affane Aji C., and M. Rossi, Integrating a Flight Simulation Environment in the Classroom to Teach Math & Science, **Proceedings** of the International Society for Technology and Education (ISTE), 2012
- Khan, M. J., Rossi M., Aji C., and Heath B., The Development and Implementation of a Flight Simulation Based Environment for Teaching Math & Science, Society for Information Technology & Teacher Education International **Conference** (SITE), 2012
- Khan, M. J., Rossi M., Aji C., and Heath B., Flight Simulation Based Environment for Teaching Math and Science, **Proceedings** of Society for Information Technology &

PRESENTATIONS, POSTERS, AND HIGHLIGHTS

- Video lecture production with any tablet. **Presentation** at the Online Faculty Development Workshop, March 18, 2015
- Using iPad and Wacom tablet to create your own video. **Presentation** at the Office of Distance Education and Online Learning (ODEOL) workshop, March 10, 2015
- Invited **lecture**, The Nation, Culture, and Architecture of Morocco. Presentation to students and faculty in Robert R. Taylor School of Architecture and Construction at Tuskegee University, February 25, 2015
- Virtual To Reality: Teaching Mathematics And Aerospace Concepts To Undergraduates Using Unmanned Aerial Systems And Flight Simulation Software, accepted for oral **presentation** in the *2015 International Education Conference in Maui*, January 5-7, 2015
- An Investigation Of Spatial Visualization Skills Of Minority Students, accepted for oral **presentation** in the *2015 International Education Conference in Maui*, January 5-7, 2015
- Using iPad as a whiteboard to interact with a laptop. **Presentation** at the Office of Distance Education and Online Learning (ODEOL) workshop, December 3, 2014
- Invited **presentation** in French class at Tuskegee University, October 29, 2014
- STEM Learning and Research Center, STELAR October 2014 **newsletter**, Volume 1, Issue 3:
<http://us3.campaign-archive2.com/?u=f6c16a0673a4355d6f79c7884&id=84266abac9&e=64d9874f77>
- STELAR Project **Spotlight** 2014: <http://stelar.edc.org/blogs/sarita-pillai/project-spotlight-innovative-flight-simulation-experiences-students-and-teachers>
- The ITEST NSF **Highlights** 2013
http://www.research.gov/research-portal/appmanager/base/desktop?_nfpb=true&_windowLabel=awards_1&_urlType=action&_wlpawards_1_id=%2FresearchGov%2FAwardHighlight%2FPublicAffairs%2F2013%2F23331_FlyingHighWithMathandScience.html&_wlpawards_1_action=selectAwardDetail
- Best Practices Online Teaching and Learning. **Presentation** at the Office of Distance Education and Online Learning (ODEOL) workshop, September 24, 2014
- The Incorporation of Distance Education/Virtual Learning Strategies. **Presentation** to the Agriculture Department TU Annual Workshop, Calloway Garden AL, June 5, 2014
- Hybrid, Blended, and Flipped Modalities of Instruction. **Presentation** at Tuskegee University Faculty Center for Teaching and Learning, Workshop April 3, 2014
- Using Software Applications for Developing Video Lessons. **Presentation** at Tuskegee University Faculty Center for Teaching and Learning, Workshop April 3, 2014
- MATLAB Environment and Research in Mathematics Department at TU. **Presentation** at the Fifth Joint Annual Research Symposium (JARS), Tuskegee University, Feb 27-28, 2014
- Solving Equations. **Presentation** to Math 107, Math 108, and Math 207 students at Tuskegee

University, T-CAEIL Workshop, January 2014

- Innovative Flight Simulation Experiences for Students & Teachers: Integrating a Flight Simulation Environment in the Classroom to Teach Math and Science Concepts. **Poster** presented at the NSF ITEST STELAR, Washington DC, August 2014
- Numerical Methods for Solving Nonlinear Equation. **Presentation** for mathematics senior students seminar, November 4, 2013
- Wacom Tablet and Video Preparation. **Presentation** for the Online Teaching Center at Tuskegee University, October 23, 2013
- Using a UAV to Teach Undergraduates Math and Aircraft Performance. **Presentation** at the American Society of Engineering Education (ASEE), Annual Conference and Exposition, 23-26 June 2013, Atlanta, GA
- The Integration of Scilab into College Calculus. **Presentation** at the Alabama Association of College Teachers of Mathematics (AACTM) Annual Meeting, Birmingham Southern College, Birmingham AL, Feb 2013
- Integrating a flight simulation environment in the classroom to teach Math and Science concepts. **Poster** presented at the NSF ITEST Summit, Washington DC, February 29-March 1, 2012
- Integrating a Flight Simulation Environment in the Classroom to Teach Math & Science, the International Society for Technology and Education (ISTE) **Poster**, 2012
- The Development and Implementation of a Flight Simulation Based Environment for Teaching Math and Science, Society for Information Technology & Teacher Education (SITE) **Poster**, March 5-6, 2012
- Integrating a flight simulation environment in the classroom to teach Math and Science concepts. **Poster** presented at the NSF ITEST Summit, Washington DC, March 3-4, 2011
- Integrating a flight simulation environment in the classroom to teach Math and Science concepts. **Poster** presented at the NSF ITEST Summit, Washington DC, March 3-4, 2010
- On annuli containing all the zeros of a polynomial, **Abstract** and **Presentation** in Alabama Association of College Teachers of Mathematics (AACTM), Montgomery AL, February 19, 2011.
- Location of Zeros of Polynomials, **Abstract** and **Presentation** in American Mathematical Society (AMS), San Francisco CA, January 13-16, 2010
- A Partitioning Algorithm for Computing Limiting Distributions of Ill-Conditioned Markov Chains, **Abstract** and **Presentation** in Alabama Association of College Teachers of Mathematics (AACTM), Jacksonville AL, February 28, 2009
- Poroelasticity, abstract and presentation in the Mathematical Association of America (MAA), **Abstract** and **Presentation** Joint Mathematics Meeting, Washington DC, January 5-8, 2009.