## **REBECCA** ANDERSON, Ph.D.

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#### SUMMARY

Trainer/Educator/Analyst with expertise in identifying and applying divergent, interdisciplinary perspectives and strategies to STEM and liberal studies research and teaching collaborations.

Language proficiencies in Turkish (ACTFL oral proficiency "Intermediate Mid") and French

■ Cleared for top secret information and granted access to sensitive compartmented information based on single-scope background investigation completed on 4 Nov 2015.

#### **DoD STEM**

**Training Analysis and Documentation.** Analyze and develop recommendations on military training equipment; research and generate training documentation on communication and sensing technologies.

**Training.** Collaboratively construct interdisciplinary instructional framework for and teach workshops and courses on software-defined radio, non-lethal weapons, and metacognitive instructional strategies for technical content delivery.

## Liberal Studies

**Education.** Create and teach hybrid literature, applied linguistics, speech, and rhetoric & composition undergraduate courses at universities in U.S., Turkey, and Taiwan.

**Training.** Individually and collaboratively research, develop, and present workshops to undergraduate faculty on education strategies leveraging applied linguistics, learning, narrative, and culture studies perspectives and theories.

#### Team Optimization Problem-solving.

Leverage inquiry and observational research skills to identify patterns in complex systems and teams for creating novel problem-solving approaches.

**Team Optimization.** Assess trigger behaviors, linguistic patterns, and choices to adapt and structure collaborative engagements promoting inclusion and mitigating conflict.

#### **EDUCATION**

- **Ph.D**., English Studies, Illinois State University
  - **Dissertation**. "The Efficacy of the Turkish Nasreddin Hodja Tales in a Global Citizenship Pedagogy." Interdisciplinary Research: Applied Linguistics, Education, Literature, and Culture Studies
  - **TESOL Graduate Certificate** (Teaching English to Speakers of Other Languages)
- M.Ed., Curriculum and Instruction Children's Literature, Pennsylvania State University
- **B.A.**, English Literature, University of Maryland University College
- **B.S.**, Elementary Education, University of Maryland
  - Minor Concentration. Mathematics
  - Certification. Maryland Standard Professional-2. Elementary Middle School

#### EXPERIENCE

**CONTRACT AND GRANT ACTIVITIES** 

#### Assistant Research Professor. ARL Penn State. Reston, VA. July 2015 - Present

**Office of Naval Research: Communication and Sensing Technologies Training Documentation**. Led collaborative training documentation development for ONR program of communication and sensing technologies to support the Navy and Marine Corps. July 2019-Feb 2020; June 2020 – present.

**Penn State University's Center for Security Research and Education: Online Robotics Learning Module.** Lead research and development of robotics curriculum featuring robotics Android Application, and teacher training module. Stages 1 and 2 Program Implementation: STEM high school and community college students enrolled in computer science courses offered by program partners: Charles County Public High Schools and College of Southern Maryland. Stage 3 Program Implementation: Program will be revised for online access and scaled for national distribution. June 2019 – present.

Naval Surface Warfare Center: Software-Defined Radio Workshop. Led collaborative development and instructional delivery of two-day Software-defined Radio Workshop to Naval Surface Warfare Center, Indian Head Explosive Ordnance Disposal Technology Division personnel. Oct. 2019.

**Submarine Learning Center: Training Device Recommendations.** Analyzed training device needs of Submarine Learning Center curriculum associated with operation and maintenance training for the "new design" 42G Ship Service Motor Generator. Conducted document analysis, Subject Matter Expert interviews and site visits. Submitted recommendations in Training Device Decision Coordination Paper. March – Oct 2019.

**Air War College: Non-lethal Weapons Graduate Elective.** Taught Non-Lethal Weapons graduate elective course, leveraging technical content, together with interdisciplinary theories and strategies, to advance lateral- and critical-thinking capabilities supporting operational and strategic thinking in 21<sup>st</sup>-century conflict and warfare. Montgomery, AL. Oct-Dec 2018.

**Intelligence and Information Warfare Directorate: Data-Driven Authorship Feature Extraction and Comparative Analysis Using Machine Learning.** Collaborate with computational mathematicians to automate identification of online communication features. Project contributions focused on semantic prosody (SP), or meaning that expresses attitude and evaluation. Although they do not consciously recognize it, SP is meaningful to transmitters and receivers, and they are influenced by SP meanings. I2WD, CERDEC, R&E Command, Future Command, US Army. Sept – Dec 2018.

#### EXPERIENCE

#### CONTRACT AND GRANT ACTIVITIES (Cont'd)

#### Assistant Research Professor. ARL Penn State. Reston, VA. July 2015 - Present

# Air Force Research Laboratory: After Action Review Analysis and Revision Recommendations.

**Summer Faculty Fellow.** Analyzed After Action Review (AAR), a team's collaborative performance-feedback discussion following a recently-completed event. Applied novel interdisciplinary lenses to analysis, including applied linguistics and narrative research. Proposed AAR reformulation focusing on regulation of cognitive biases and emphasizing the mitigation of the detrimental effects of dysregulation such as suppression and avoidance. Fairborn, OH. June 2018 – Aug 2018.

**Marine Corps: Professional Military Education.** Led collaborative development and presentation of metacognition training strategies for technical content delivery to Marine Corps instructors. Marine Corps Department Training Command, Ft. Leonard Wood, MO. March 2017

Joint Improvised-Threat Defeat Organization: Virtual Persona in the Violent Extremist Messaging System. Analyzed online social media communications, applying interdisciplinary theories and methodologies to uncover language patterns in event-specific databases of tweets. Dec 2016 – June 2017

**ONR: Sea, Air & Land Challenge.** Judged high school robotics competitions. Assessed program methodology supporting promotion of STEM education and Navy career investment. Researched and developed recommendations for implementation revisions. Indiana and Pennsylvania. Spring 2017

**IPA:** Chief of Naval Operations Strategic Studies Group. **Technology/Humanities Fellow.** Collaboratively researched training and education for human-machine teaming, including primary research through meetings with senior military officers, DoN, DoD, industry, and academic civilian experts. Contributed to CNO SSG 35 Report for outbrief to CNO Richardson and distribution to Navy stakeholders: "The Network of Humans and Machines as the Next Capital Ship." Newport, RI. Oct 2015 – Sept 2016

#### **UNDERGRADUATE TEACHING**

#### Pennsylvania State University

**Lecturer.** Courses designed and taught: *Rhetoric and Composition*. Conventional classroom (14 sections); World Campus online (12 sections). State College, PA. Aug 2013 – Present

#### **ONPS-Fu Jen University**

**Visiting Professor.** Courses designed and taught: *Introduction to Literature*; *University Writing Seminar*; and, *Communication and Public Speaking*. Taipei, Taiwan. July-Aug 2015

### Pamukkale University

**Fulbright Fellow.** Courses designed and taught: *Discourse Analysis*; *English as a Foreign Language*; Developed and Presented: *Weekly Cultural Presentation and Discussion Series* (30 sections). Denizli, Turkey. Sept 2009 – June 2010

## **Illinois State University**

**Graduate Teaching Assistant.** Courses designed and taught: *Literary Narrative* (3 sections); *Composition as Critical Inquiry* (7 sections); *Writing in the Academic Disciplines* (1 section); *Composition for Presidential Scholars* (1 section); *Advanced Composition* (1 section); *English as a Second Language* (15 sections); *Foundations in Literature for Children* (4 sections). Normal, IL. Aug 2007 – Aug 2009; Aug 2010 – May 2013

## HONORS, GRANTS, and FELLOWSHIPS

## International

- Critical Language Scholarship for Turkish language immersive study, U. S. Department of State. Ankara, Turkey. Summer 2011.
- Fulbright English Teaching Assistant, U.S. Department of State. Denizli, Turkey. 2009-2010.

## Domestic

- Summer Seminar Participant, *The Late Ottoman and Russian Empires: Citizenship, Belonging and Difference*, National Endowment for the Humanities, George Washington University, Washington, D.C. 2014.
- Ora Bretall Fellowship for Dissertation Contributing to the Development of Educational Theory and Practice, Illinois State University. 2011.
- Hannah Beiter Graduate Student Research Grant, Children's Literature Association. 2009.
- Illinois TESOL/Bilingual Education Graduate Scholarship Award, Illinois Teachers of English to Speakers of Other Languages – Bilingual Education. 2009.
- Taimi Maria Ranta Children's and Young Adult Literature Scholarship, Illinois State University. 2008.
- Illinois State University Foundation Fellowship. 2007.
- Chicago Foundation for Education grant to support fifth-grade mentorship program for disadvantaged students, KIPP Ascend Charter School, Chicago, IL. 2004-2005.

## SELECTED REFEREED JOURNAL ARTICLES

Uncovering Unconscious Cultural Assumptions in Progressive Era Publications of Turkey's Nasreddin Hodja Tales." *Journal of the American Studies Association of Texas*. November 2014.

"The Nasreddin Hodja in 19th-Century United States Literature: Meanings Past and Lessons Present." Haceteppe University's peer-reviewed, scholarly folklore journal, *Türkiyat Araştırmaları* 10 (2009), 5-11. Invited.

## SELECTED WORKSHOPS and PRESENTATIONS

"Coordinating Cyber Community Protection Operation (C-3PO)." 2020 NICE K12 Virtual Cybersecurity Education Conference. December 2020.

"Rhetoric and Composition for Global Citizens: A Fulbright-Influenced Model for Revising Today's General Education Courses to Prepare Tomorrow's Global Citizens." *37<sup>th</sup> Annual Fulbright Conference: "Dare to Act,"* Washington, D.C. October 2014.

"Critical Language Scholarship Program: Writing the Application, Experiencing the Program," *Informational Workshop*, Illinois State University, Normal, Illinois. April 2012. Invited.

"Fulbright & CLS Programs: Application Process, Teaching Practice Benefits," *Illinois Teachers* of English to Speakers of Other Languages – Bilingual Education Convention: "Getting the Balance Right." Lisle, Illinois. February 2012.

"Limitations of Language Acquisition via Facebook Interactions with Turkish Students." *Georgetown University Round Table on Languages and Linguistics*: "Discourse 2.0: Language and New Media," Washington, D.C. March 2011.

"Applying for a Fulbright Scholarship" and "A Fulbright Year in Turkey," *Fulbright Informational Workshop*, Illinois State University, Normal, Illinois. April 2011. Invited.

"Living in Turkey" and "Turkish Education," *Fulbright Pre-Departure Orientation for English Teaching Assistants to Turkey*, Washington, D.C. August 2010. Invited.

Workshop (with Pınar Karahan) "Revisioning Curriculum and Teacher Education Methodologies: Deploying Discourse Analysis to Promote Intrinsic Motivation." XIV World Congress of Comparative Education Societies: Bordering, Re-Bordering and New Possibilities in Education and Society. Boğaziçi University, Istanbul, Turkey. June 2010.

"Promoting Pragmatic Competence via Turkey's Nasreddin Hodja Tales." 6th International ELT Research Conference: "Trends in SLA Research and Language Teaching," Çanakkale Onsekiz Mart University, Ephesus, Turkey. May 2010.

Workshop (with Pinar Karahan) "Revisioning Curriculum and Teacher Education Methodologies: Deploying Discourse Analysis to Promote Intrinsic Motivation." *Teacher Training Workshop*. Pamukkale University, Denizli, Turkey. May 2010.

"Foreign Language Education for KidsChildren," *Erzurum American Corner*, Atatürk University, Erzurum, Turkey, April 2010. Invited.

"EFL & ESL Lessons Based on Turkey's Nasreddin Hodja Tales," *Teacher Training Presentation*, Pamukkale University Foreign Languages Department faculty, Denizli, Turkey. December 2009. Invited. "A Cultural Deconstruction of Mark Twain's Writings About 1867 Turkey," 7th International Congress for Turkish Culture: "Istanbul in Turkish and World Culture," Atatürk Center for Culture, Ankara, Turkey. October 2009. Invited.

"The Nasreddin Hodja in 19<sup>th</sup> Century American Literature: Meanings Past and Lessons Present," *American Folklore Society Conference*, Louisville, Kentucky. October 2008.

"From Fixity to Flexibility: The Humor of Nasreddin Hodja Fosters Critical Thinking in Young Readers," *Children's Literature Association Conference: "Reimagining Normal,"* Bloomington, Illinois. June 2008.

## SELECTED AWARDS, ACHIEVEMENTS, AND ACTIVITIES

- Panelist. Intelligence and National Security Alliance: *Human Machine Team: The Intersection of Diverse Skill-sets*. Contributed insights on the critical role of soft skills in optimizing Artificial Intelligence collaborations, focusing on interdisciplinary communication challenges, opportunities, and training recommendations. June 2020
- Advisory Board Member. NSF Program: Investigating the Communication-Prototype Nexus in Engineering Design: Towards Automated Feedback via Machine Learning. Meet annually with program investigators to review results and provide advice/recommendations for program research and development. 2019-2022
- **Member.** *K12 Working Group.* National Initiative for Cybersecurity Education. Develop strategies and recommendations for filling the national cybersecurity pipeline through a K-12 Cybersecurity Education Strategy. 2020-
- Volunteer Interviewer. Candidates for National Security Language Initiative for Youth *Program.* U.S. State Department. Washington, DC. Application Years 2018; 2020.
- Application Evaluator. *Candidates for Future Leaders Exchange*. U.S. State Department. Washington, D.C. Application Years 2018; 2019; 2020; 2021.
- **Participant.** Scientists to Sea Program.
  - Task Force Ocean event. Onshore acoustics and simulator training and tour of in-port Virginia-class submarine, USS Colorado. Groton, CT. April 2019.
  - Three-day underway on Arleigh Burke-class destroyer, USS Sampson. Interdisciplinary team of scientists and researchers toured spaces and visited with Sailors from every department aboard, as well as witnessed shipboard operations. San Diego, CA, April 2016.
- **Participant.** *Breaking the Mold 2.0* workshop, Naval War College, Newport, RI. October 2018. Sponsored by Navy Undersecretary Thomas Modly.
- **Participant.** *Task Force Ocean*, Human Capital working group, Arlington, VA. August 2017 June 2018.
- **Participant.** *Black Engineer of the Year Awards STEM Conference*, Washington, D.C. Feb 2017.
- **Participant.** Fulbright Association Annual Conference, *Fulbright at 70: Meeting New Challenges*, George Washington University, Washington, D.C. Nov 2016.
- **Participant.** *Immersive Reality Symposium*, Pennsylvania State University, University Park, PA. Oct 2016.
- Participant. Defense Entrepreneurs Forum 2016, Chicago, Illinois. Oct 2016.

Pennsylvania State University, State College, PA

- **Fulbright Review Board Member.** 2014
- □ **Participant.** Course Design Academy, competitive-selection program conducted by Schreyer Institute. May 19-23, 2014.
- **Referee.** *Pamukkale University Journal of Faculty of Education.* Pamukkale University, Denizli, Turkey. 2012.
- Chair, Advocacy Committee and Member at Large, Board of Directors, Illinois Teachers of English to Speakers of Other Languages – Bilingual Education, Chicago, IL. 2011-2012.
- Illinois State University, Normal, IL
  - Graduate Council Member. 2010-2011
  - □ Graduate Curriculum Committee Member. 2010-2011
  - □ **Participant.** Future Professors Workshop. May 18-21, 2009.
- **Guest Lecturer.** 5<sup>th</sup> Grade: Turkish Folktales Lessons. *Metcalf Elementary School*. Normal, IL. 2008
- Volunteer Teacher. Intermediate Literacy/Citizenship Adult ESL. *Hogar Hispano*. Arlington, VA. 2006-2007
- Volunteer Grant Writer/Guest Assistant to Reading Teacher. Collaborated with 5<sup>th</sup>grade Reading Teacher to write winning Chicago Foundation for Education grant. *KIPP Ascend Charter School*. Chicago, IL. 2004-2005.
- Guest ESL Teaching Assistant. Taught introductory language lessons to recent refugees, 6<sup>th</sup> – 8<sup>th</sup> grades. *Lufkin Road Middle School*. Raleigh, NC. 2004.