Jonathan C. Rann, PhD

EDUCATION

University of South Carolina, PhD., Psychology (Cog./Neural)	Summer 2023
University of South Carolina, M.A., Experimental Psychology	Spring 2021
North Carolina A&T State University, M.S., Computer Science	Summer 2011
University of North Carolina (Charlotte), CERT., Info-Security	Fall 2010
Winston-Salem State University, B.S., Computer Science	Fall 2007

HIGHLIGHTS

- **Graduate degrees in advanced scientific disciplines**
- **SMART (2020) & NSF (2012) Federal Scholarship Fellow**
- **Owner of Genesis Tech Solutions**
- **Senior Full Stack Developer**
- **Publications in psychological and computing sciences**

PROFESSIONAL EXPERIENCE

Naval Information Warfare Center Atlantic (NIWC LANT), June 2012 – present
Computer Scientist

- **Multidisciplinary Research Center (MRC), June 2016 – present**
  Psychological Scientist
  - Served as co-researcher on projects involved with the design, development, execution, and analysis of data from human behavior experiments
  - Served as co-researcher on projects involved with the development of analytics tools for data extracted from select social media platforms
  - Developed in-depth literature reviews on core concepts related to machine learning (ML) and natural language processing (NLP)
  - Developed a widely used NLP question answering service based on a DistilBERT transformer model, that utilizes Python and Java interfaces

- **Consolidated Afloat Networks and Enterprise Services (CANES), April 2013 – June 2016**
  Systems Engineer
  - Assisted with the planning, programming and implementation of CANES Software 1 (SW1) automated deployment solution for Naval fleet
  - Successfully installed and tested CANES SW1 system on USS Milius (DDG 69), USS McFaul (DDG 74), and USS LaBoon (DDG 58)
  - Assisted with CANES Software 2 (SW2) management software supplantation of VMware vCenter for Microsoft Systems Center 2012
  - Created and maintained extensively detailed CANES SW2 Virtual Machine and Installation Process Workflow diagrams

- **Vulnerability Auditing, Analysis, and Management Team (VAAT), September 2012 – April 2013**
  Computer Security Analyst (Team Lead)
  - Performed various DoD OS installations, built scanning servers, installed and configured Retina scanners
  - Compiled vulnerability assessments after audit scans of government assets; assisted users in mitigating issues
  - Developed documents which described all aspects of the VAAT (technical processes, staff onboarding/exit, strategies, etc.)
  - Helped reduce Category 1 vulnerability exposure for the command by 30% over project duration

- **Tactical Switching (TSw) and Enterprise Network Management System (ENMS), June 2012 – September 2012**
  Network Engineer (Project Manager)
  - Managed and coordinated major rack relocation initiative for Tactical Switching team
  - Developed detailed network cabling and rack hardware diagrams
  - Served as co-project manager and government POC for contractors during ENMS Tech Refresh initiative
  - Coordinated with various team leads and scientists to successfully manage outages related to multiple power relocation efforts

TEK Systems, July 2011 – June 2012
Information Technology Specialist

- **Bank of America, October 2011 – June 2012**
  Information Security Engineer, Global Information Systems of Bank of America
  - Monitored and analyzed bank proxy traffic using proprietary insider threat analysis software
  - Investigated suspicious HTTP/HTTPS traffic, categorized websites based on analysis
  - Blocked suspicious websites and notified users in violation bank internet usage policies
  - Lead group that analyzed behavioral trends regarding bank employees' internet usage habits

- **AFL Network Services, July 2011 – September 2011**
  Network Technician, Wachovia – Wells Fargo IT Upgrade and Transition Project
  - Assisted in the modernization effort of outdated and poorly maintained bank building cabling terminals and wiring infrastructure
  - Installed and configured CISCO switches, routers, and servers
  - Cabled networks, and performed network analysis and testing
  - Worked with Quality Control inspectors to ensure completed networks operated up to standard

Oak Ridge National Laboratory (ORNL), Summers of 2010, 2009, and 2006
Researcher, Research Alliance in Math and Science (RAMS) Internship Program, United States Department of Energy (DoE)
  - Served as representative for program directors by mentoring interns and leading researching initiatives (2010, 2009, and 2006)
  - Developed advanced tool for deploying scientific applications to Microsoft Azure cloud computing environment (2010)
  - Compared and evaluated climate model data taken from the Inter-governmental Panel on Climate Change (2009)
  - Compared efficiency metrics of multithreading and parallel programming with Message Passing Interface (MPI) (2006)

PUBLICATIONS

- *Rann, J. & Almor, A. (2022).* **Effects of Verbal Tasks on Driving Simulator Performance**. *Cognitive research: Principles and Implications, 7(1), 12.*
- *Rann J. C.(2018).* **A Probabilistic Framework for Assessing Driving Performance**. *In John McFadden (Ed.), Grace Jordan McFadden Professor's Program Monograph (pp. 39-52). Columbia, SC: University of South Carolina.*
- *Yu, H., Powell, N., Stembridge, D., & Rann, J. (2014).* **Developed and Taught Course Modules to Enhance Cloud Computing Education**. *In CSEDU (2) (pp. 167-175).*
- *Yu, H., Rann, J., & Zhan, J. (2012, May).* **SUCH: a cloud computing management tool. In New Technologies, Mobility and Security (NTMS)**, *2012 5th International Conference on (pp. 1-4). IEEE.*

CORE COMPETENCIES: Applications (Active Directory; Adobe Suite (Dreamweaver, Illustrator, Photoshop); Audacity Audio Editor; GNU Gimp; Microsoft Office Suite (Visio, Powerpoint, Word, Excel); Virtual Machines (VMWare vCenter, Microsoft Systems Center); Skills (Computer Maintenance, Repair, and Virus Removal; Data Analysis using Inferential Statistics (R, Matlab, SAS, SPSS); MRI Scanning; Network Traffic Analysis; Programming Languages (C# (Microsoft Visual Studio), Java (eclipse), Python); Website Development (CSS, HTML).