Sean Sanders

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EDUCATION

State University of New York at Buffalo May 2021
PhD in Computer Science and Engineering Buffalo, NY
GPA: 3.77

- **Coursework**: Data Structures, Algorithms, Databases, Computer Systems, Machine Learning, VLSI Chip Design
- **Research**: Blockchain, Compilers, Cybersecurity
- **Committee**: Dr. Lukasz Ziarek (chair), Dr. Bharat Jayaraman, Dr. Weihang Wang

Rochester Institute of Technology May 2016
MS in Computer Computer Networking and System Administration Rochester, NY
GPA: 3.96

- **Coursework**: Configuring networks, Network Security, Wifi Access Points Configuration
- **Research**: Private Cloud Deployment with Docker and Kubernetes
- **Advisor**: Dr. Charlie Border

Buffalo State College May 2014
BS in Computer Information Systems Buffalo, NY
GPA: 3.9

- **Awards**: Graduated Summa Cum Laude
- **Coursework**: HTML and CSS programming, C# programming, C++ Programming, PowerShell

Erie Community College May 2012
AS in Telecommunications Technology Buffalo, NY
GPA: 3.5

- **Awards**: Graduated Summa Cum Laude
- **Coursework**: Computer Networking, System Administration, Digital Electronics

Research

- Sanders, S., & Ziarek, L. (2022, January). Developing a Zen Click Fraud Detection Framework Using Smart Contracts. Proceedings of the 55th Hawaii International Conference on System Sciences
- Xunyi Wang, Sean Sanders, G. Lawrence Sanders, "Examining The Impact Of Yelp's Elite Squad On Users' Following Contribution", Session on Business Analytics in the Age of AI, INFORMS Annual Meeting, (2021)
- Haimonti Dutta and Sean Sanders, "NetRank: Network based Ranking of Person Name Entities from Noisy OCR Text", Session on Text Analytics and natural Language Proccessing, INFORMS Annual Meeting, (2021)
- Dark Traits and Hacking Potential J Gaia, GL Sanders, SP Sanders, S Upadhyaya, X Wang, CW Yoo Journal of Organizational Psychology 21 (3), 23-46
- Sanders, S., & Ziarek, L. (2021, January). A comparison and contrast of Apktool and Soot for injecting blockchain calls into Android applications. Proceedings of the 54th Hawaii International Conference on System Sciences 2021
- Joana Gaia, Bina Ramamurthy, G. Lawrence Sanders, Sean Patrick Sanders, Shambhu Upadhyaya, Xunyi Wang, Psychological Profiling of Hacking Potential, Proceedings of the 2020 Hawaii International Conference on System Sciences January 2020

- Sanders S.P, Sanders G.L "An Integrated Experiential Approach to Teaching Blockchain and Hashing Concepts", HICSS-53 Mini Tracks and Minitracks on SWTs on Curriculum Development, January 2020
- Bina Ramamurthy, Sanders S.P., Sanders G.L. The Blockchain ART Simulation (BARTS) for Teaching Blockchain Concepts", Presented at 50th Annual Conference of the Decision Sciences Institute in New Orleans, Louisiana, November 2019. (View at: https://artbarts.com/)
- Sanders, S.P. Anoncing the Performance of Hashing Algorithms, Presented at Consortium for Computing Sciences in Colleges North Eastern, Marymount University October 2018, received the Best Student Paper Award.
- Sanders, S.P. and Border, C. Private Cloud Deployment with Docker and Kubernetes, Journal of Computing Sciences in Colleges, Vol. 33 No. 3, 2017

Programming Languages Experience

- Solidity (Ethereum blockchain smart contract programming)
- SAS
- Java
- C, C++, C
- Visual-Basic
- JavaScript
- HTML

Frameworks and Tools

- Soot framework
- Kubernetes
- Remix IDE
- Blockchain Ethereum

Most knowledgeable

- Remix
- Soot framework
- Java
- R

Teaching Experience

- Worked as a TA at State University of New York at Buffalo
  - Taught data structures concepts during recitation
  - Prepared Recitation Material
  - Taught CSE 431/531 Algorithms class - Taught and graded the material

- Sean Sanders, George Sanders, "An Integrated Experiential Approach to Teaching Blockchain and Hashing Concepts", Workshop at HICSS 53, January 2020
- Sean Sanders, George Sanders "The Blockchain ART Simulation (BARTS) for Teaching Blockchain Concepts", Case study for Decision Science Institute conference in New Orleans, November 2019
- **2016-2021**: Helped with teaching at GenCyber Camp
    - HTML Programming
    - Blockchain Smart Contract programming
    - JavaScript, CSS, and JQuery Programming

Work Experience

Praxair

- Documentation Expert for a point of sales systems for a trucking application
- Praxgraph project: Designed, programed and implemented an asset management system in Visual Studio, C, and 2014 SQL server
- Programming Languages Used: C, ASP, JavaScript, HTML
- Helium Project: worked on documenting the security system for the truck tracking system used in Brazil and the U.S. Produced a written guide on how the operators interact with the system.
- Utilized Visual Studio 2013 and GhostDocs.
- TFS Project: worked on programming a help menu for the Team Foundation Server system.
- Designed the help menu for interacting with a database
- Application error testing: implemented an application error checking system. The system interacts with the companys web site and tracks all application errors. I also designed the SQL database.

Volunteer Experience or Leadership

- **2016-2021**: Helped with teaching at GenCyber Camp
    - HTML Programming
    - Blockchain Smart Contract programming
    - JavaScript, CSS, and JQuery Programming
- Volunteer at Friends of the Knight at Buffalo, NY

SKILLS

Programming & Development Tool Skills

- Knowledge of programming within a production environment
- Programming and working with master pages
- Programming with PHP, ASPX.NET framework, JavaScript, and JQuery
- Troubleshooting techniques to solve common programming issues
- Creating a working asset management system
- Blockchain and Dapp Development

- Knowledge of advanced troubleshooting techniques
- Advanced knowledge of Python Programming
- Basic programming with C++ and C#
- Microsoft Visual Studio 2019
- Microsoft Visual Basic programming
- GhostDocs- used for documenting code

Networking Skills

- Ability to troubleshoot and manage complex networks
- Ability to understand potential bottlenecks and problematic sections of network based on network topology
- Understand cable and network management techniques
- Ability to create network diagrams that are meaningful and useful
- Understanding of site surveys for businesses
- Understanding of various network technologies, including pros and cons of each
- Acrylic Wi-Fi Professional Analyzer (analyzes wireless signals and traffic packets
- Wireshark (used to capture packets and troubleshoot network problems
- Vyatta virtual machine (utilized to create a virtual network)

Cyber Security Skills

- Understanding of Security issues in networks
- Basic understanding of security network monitoring techniques
- Understanding of hackers mindset and psychology
- Helped University at Buffalos cyber security students with their internal cyber security competition (participated for 3 years)
- Helped with the security networking portion and set up the test environment using Vagrant with VirtualBox
- Tested physical security and performed DOS attacks against the router to test the troubleshooting techniques being used
- Helped solve common networking issues by setting up a cyber-security network
- Environment Tools: Backtrack 5, Kali Linux, Armitage, Metasploit Framework, John the Ripper, Wireshark