VITALY FORD

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OBJECTIVE

Discover Innovation → Deliver Success

EDUCATION

Tennessee Tech University – Cookeville, TN
Ph.D. in Engineering, Computer Science, Cybersecurity, May 2017.
Dissertation Title: A Secure Privacy-Preserving Advanced Metering Infrastructure Supporting Fine-Grained Energy Consumption Data Analysis
Dissertation Mentor: Dr. Ambareen Siraj
Tennessee Tech University – Cookeville, TN
Master's in Computer Science. August 2015.
Ural Federal University – Yekaterinburg, Russia
Information Systems and Technologies Engineer. Sep 2007 – Jun 2012.

PROFESSIONAL EXPERIENCE

Co-founder/Chief Technology Officer at Citodex Technology Ltd.
Bespoke document processing AI chat agents that automate mundane document tasks for specialty insurance sector. August 2023 – **Present.**
Associate Professor, Computer Science at Arcadia University. August 2017 – **Present**.
https://www.arcadia.edu/faculty-and-staff/vitaly-ford
Computer Science/Data Science/DDCT Program Coordinator. Fall 2025 – **Present**.
Engineering Program Liaison. Fall 2025 – **Present**.
Courses taught:
1. Computer Organization and Architecture
2. Data Structures and Algorithm Analysis
3. Operating Systems
4. Network Security
5. Capstone I and II
6. Penetration Testing / Practical Security Assessment
7. Co-teaching CS101/CS202 Programming I/II at Jiangsu University

Instructor of Record
Taught Principles of Computing course, 2 sections. Fall 2016**.**
Taught OO Programming, Introduction to Penetration Testing courses. Spring 2017.
Graduate Research Assistant
Security of the Cyber-Physical Systems, Cybersecurity Education Research and Outreach Center, Tennessee Tech University (TTU). Center for Energy Systems Research.
January 2013 – May 2017.
GenCyber Cybersecurity Lead Instructor
Developed curriculum and taught K-12 students and teachers at GenCyber Camp, TTU.
January – August 2016, January – August 2017.
Vice President & Founding Member
Led and managed the CyberEagles Cybersecurity club at TTU. Developed a Mentor Internship Program, resources, training seminars, social activities, and organized conference trips. August 2013 – August 2016.
Web-programmer
Analyzed the requirements and developed websites for the CyberEagles Cybersecurity Club and Engineering Joint Council, TTU. Spring 2014 – Spring 2016.
Teaching Assistant
Tutored students and managed labs (C++) at CS Department, TTU. Fall 2012.
IT support for the Engineering Department
Computer Science Department, TTU. Fall 2012.
Technician, Software Developer
Laboratory of Distant Monitoring Methods**,** Yekaterinburg, Russia. Ural Federal University. October 2009 – May 2012.
Responsible for designing and developing the following software/hardware products according to the set requirements:

- A compact computer vision system for precise (error: 0.2 mm) measuring the distance between rolls of a continuous casting machine.
- A computer vision system for measuring 3D coordinates of moving objects.
- An accurate semi-automatic calibration technique for the above-mentioned systems.

PROFESSIONAL ACTIVITIES

- **Co-Chair**, Consortium for Computing Sciences in Colleges – Eastern Region (**CCSC-Eastern**) Annual Conference: (1) Spearheaded and coordinated all aspects of conference organization, including program planning, communications, and logistics; (2) Served as primary point of contact for committees, presenters, and participants; (3) Managed conference communications, scheduling, and overall operational logistics to ensure a successful regional academic event with ~250 people joining for posters, papers, workshops/panels, keynotes, programming & CTF competitions, and networking. 2025.
- **WiCyS Global Coordinator** for the Chapter Development, Women in Cybersecurity. Worked on chapter development, WiCyS policies and bylaws, financials, reports, webinars, documentation, email/discord support, outreach. January 2018 – **Present**.
- Coach of the National Cyber League team at Arcadia University. Our best results were achieved in spring 2021 (the team placed 2nd among 266 teams in the Silver Bracket and 29th out of 922 teams overall – top 3%) and spring 2023 (36th out of 3,597 teams – top 1%). Fall 2017 – **Present**.
- **Director of Cybersecurity Research & Development**, National Cybersecurity Students Association. Worked on cybersecurity education projects, curriculum, and competitions development. January 2020 – January 2024.
- **Intro to Keynote speaker** at the Women in Cybersecurity 2024 conference, April 2024.
- **Advisory Board member** for the SBIR Phase I:A Technology-Enhanced Statistics Learning Software App grant, $275,000, September 2023.
- **Merit Reviewer** for the 2022 National CyberWatch Center's Innovations is Cybersecurity Education. February – May 2022.
- Member of the Organizing Committee, *Nineteenth International Conference on Computability and Complexity in Analysis.* May 2022. URL: http://cca-net.de/cca2022/
- **Guest Associate Editor**, "Deep Learning for IoT Security", at *Frontiers in Big Data journal*, 2022. URL: https://www.frontiersin.org/research-topics/24532/deep-learning-for-iot-security
- Publicity and Web Co-Chair, SaT-CPS Workshop @CODASPY 2022. Fall 2021 – 2022.
- **Technical review committee member** for the Journal of Parallel and Distributed Computing. Spring 2020 – fall 2020.
- Technical program committee member for IPDPS 2021: EduPar Workshop. Spring 2020.
- **Merit Reviewer** for the 2020 National CyberWatch Center' Innovations in Cybersecurity Education. February – March, 2020.
- **Director of Chapter Development**, National Cybersecurity Students Association. Worked on chapter development, strategic plan, association policies, web development, blog posts, webcasts, outreach and education resource management. June 2016 – December 2019.
- **KINBERCON 2019 Speaker** at two sessions: "Advancing Campus Cyberinfrastructure in PA: Updates of Funded NSF CC* Project Activities" and "Determining Technology Requirements for Scientific Innovation".
- The National Women in Cybersecurity Conference 2019: **Committee Member, Workshop presenter** ("Pittsburgh CTF: Steal the Steel"), **Lightning Talk** ("You Can Do It! The Power of the Cybersecurity Sisterhood"), **Session Presenter** ("WiCyS Student Chapter Meetup: Sharing of Experiences").
- Presenter at the Google Teaching Theatre, SIGCSE 2018 conference.
- **Grant proposal reviewer**: "New University Researchers Start up Program", Quebec, Canada. January 2018.
- **Workshop presenter** at the National Women in Cybersecurity Conference 2017: *Business Acumen*, Tucson, AZ.
- Invited Center of Academic Excellence **Tech Talk** on Consumer Privacy vs Data Mining: Issues with Smart Meter Data, January 26, 2017.
- **Invited seminar speaker** at Rochester Institute of Technology: *Privacy- and Data-Aware Smart Grid Communication*, October 18, 2016.
- **Workshop presenter** at the National Women in Cybersecurity Conference 2016:

Cybersecurity Club 101: From Inception to Installment and Beyond, Dallas, TX.

- **Program Committee Member**: ACM SafeConfig automated decisions for active cyber defense, July 2015; Journal of Supercomputing, June 2016; IEEE ISI, July 2016; IEEE Transactions on Industrial Informatics, February 2017; LCN, May 2017; ASE USENIX, June 2017; SIGCSE, September 2017; MDPI Energies Journal, July 2019.
- **Guest Lecture Speaker**: Information Assurance and Security at Tech. 2014 – 2016.
- **Invited "Lightning Talk"**: *Applying Machine Learning for Smart Meter Data Profiling*, TCIPG Summer School, Q Center – St. Charles, IL. June 20, 2013.

GRANT ACTIVITIES / SCHOLARLY HONORS

External Funding

- NSF Research on Innovative Technologies for Enhanced Learning, **PI**, "Collaborative: ASSIST: AI-Driven System for Scaffolding Instructional Strategies and Teaching", $900,000. Proposed start: 2027. Status: in review.
- NSF DRL – Cyberlearn & Future Tech, **Senior Personnel**, "ASSIST: AI-Driven System for Scaffolding Instruction and Student Tutoring", $900,000. 2025. Status: not funded.
- NSF Secure & Trustworthy Cyberspace, **Co-PI**, "SaTC: EDU: Cybersecurity Faculty Development for High School Teachers", $499,620, August 2023. Status: funded.
- NSF SaTC, **Co-PI**, "Collaborative Research SaTC EDU CySIA Faculty Development Workshops", $500,000, 2022. Status: not funded.
- NSF Science and Technology Studies, **Senior Personnel**, "Fostering a STEM Identity and Belongingness in Undergraduate Students as a Retention Strategy at a Small Liberal Arts University", 2021. Status: funded.
- American Cancer Society, **Cybersecurity Collaborator**, "Informing the Development of Equity-Centered Health Policy and Systems Decisions Through Cancer Patients' Stories", August 2021. Status: not funded.
- Retirement Research Foundation, **Cybersecurity Collaborator**, "YourStory.Health", April 2021. Status: not funded.
- NSF CNS Secure & Trustworthy Cyberspace, **Co-PI**, "Collaborative Research: SaTC: EDU: Collaborative: IASW - Information Assurance Workshops", $495,391, January 2021. Status: not funded.
- Department of Education, Fund for the Improvement of Postsecondary Education, **Co-PI**, "Open Textbooks Pilot Program", $1,101,043, November 2020. Status: not funded.
- NSA/NSF GenCyber Subaward Recipient, **PI**, Development of GenCyberCoin, May 2019 – May 2020, **$27,280**.
- NSF CC* Network Design: Transforming Arcadia's Networking Capability, Enhancing for Innovation to Grow Research Leaders in a Technology-driven World, **Co-PI**, Award Id: 1827050, July 2018 – July 2020, **$352,500**.
- NSA/NSF GenCyber Subaward Recipient, **PI**, Development of GenCyberCoin, April 2018 – April 2019, **$16,370**.
- Helped to write research proposals for NSF as a graduate student. Spring 2014, Fall 2015, Summer 2016.

Honors/Awards

- Women in Cybersecurity organization, "Ally Award". April 2024.
- **Professor of the Year Award**, Arcadia University: "awarded to full-time faculty who through their outstanding teaching skills, affect the lives and careers of students and contribute to the overall welfare of our society". May 2022.
- Special Appreciation Award Winner 2020, Women in Cybersecurity organization, for leading the WiCyS student chapter initiatives and moving forward the WiCyS mission to recruit, retain, and advance women in cybersecurity.
  URL: https://bit.ly/vford-wicys-award-2020
- Winner in the Practice Category for the 2019 National CyberWatch Center Innovations in Cybersecurity Education. "Incentive-based Platform for Teaching Cryptocurrency, Bug Bounty, Reconnaissance, and More", published in the Cybersecurity Skills Journal 2019. URL: https://bit.ly/vford-nc
- Travel grants for attending Special Interest Group on Computer Science Education (SIGCSE) workshop, CISSE The Colloquium, CTSC Cyberinfrastructure. 2016.
- Research Poster Co-Winner, 1st National Women in Cyber Security Conference. *Statistical Analysis for Fraud Detection in Smart Meters*. April 2014.

- Best Ph.D. Research Paper Award, Tennessee Tech University, April 2014.
- Research Day Poster Winner, Tennessee Tech University, April 2013, April 2015.
- Trustworthy Cyber Infrastructure for the Power Grid (TCIPG) Summer School Scholarship, June 2013, St. Charles, Illinois.
- Trusted Infrastructure Workshop Scholarship, Penn State University. June 2013.
- Research Poster Winner, Ural Federal University, April 2011.
- Winner of the "Youth Scientific-Innovation Contest", Yekaterinburg, Russia, Oct. 2011.

RESEARCH PROFILE

Cybersecurity and CS education, cryptography, smart grid security, smart meter security, consumer data privacy, fraud detection, smart meter data analysis, cloud, DevSecOps, machine learning, and large language models.

Publications and presentations (can be accessed at https://vford.me/publications)

- L. Zhang, **V. Ford**, Z. Chen, and J. Chen, "Automatic Building Energy Model Development and Debugging Using Large Language Models Agentic Workflow," *Energy and Buildings Journal*: Vol. 327. Jan. 2025.
- A. Ibrahim and **V. Ford**, "Developing More Usable and Effective Hands-on Cybersecurity Education Materials", 2024 National Initiative for Cybersecurity Education Conference and Expo, June 4-5, 2024.
- L. Zhang, Z. Chen, **V. Ford**, P. Xu, "Advancing Building Energy Modeling with Large Language Models: Exploration and Case Studies", IBPSA USA SimBuild, May 2024.
- A. Ibrahim and V**. Ford**, "Recommendations for Developing More Usable and Effective Hands-on Cybersecurity Education Materials Based on Critical Evaluation Criteria," *Cybersecurity Pedagogy and Practice Journal*: Vol. 2, No. 2. URL: Sep. 2023.
- J. Collins and **V. Ford**, "Teaching by Practice: Shaping Secure Coding Mentalities through Cybersecurity CTFs," *Journal of Cybersecurity Education, Research and Practice*: Vol. 2022. Jan. 2023.
- L. Zhang, R. Kong, H. Wang, and **V. Ford**, "Demystifying Long-Short Term Memory Model to Predict Stock Prices," poster presentation and extended abstract publication, 38th CCSC Eastern Regional Conference 2022.
- A. Ibrahim and **V. Ford**, "Observations, Evaluations, and Recommendations for DETERLab from an Educational Perspective," *Journal of Cybersecurity Education, Research and Practice*: Vol. 2021: No. 1, Article 4.
- M. Zhang, G. Zhang, S. Zhang, Z. Liu, **V. Ford**, V. Turygina, "Application of Data-Driven Measures for Impeding COVID-19 Spread at an Academic Institution", in *Proceedings of IVUS 2021: 26th International Conference Information Society and University Studies*, April 23, 2021.
- M. Zhang, G. Zhang, S. Zhang, Z. Liu, **V. Ford**, V. Turygina, "Analysis and Methodology of Inhibiting COVID-19 Spread on a University Campus", in *Proceedings of IVUS 2021: 26th International Conference Information Society and University Studies*, April 23, 2021.
- A. Pressman, T. Ramdass, P. Walls, **V. Ford**, V. Turygina, "Utilizing Virtual Reality Game design to Improve Problem Solving and Logical Thinking Skills". Accepted at the 18th International Conference of Numerical Analysis and Applied Mathematics, September 17-23, 2020.
- C. Kolb, J. Strouse, J. Palmer, **V. Ford**, V. Turygina, "Cyber Securing the Future". Accepted at the 18th International Conference of Numerical Analysis and Applied Mathematics, September 17-23, 2020.
- D. Brown, **V. Ford**, S. Ghafoor, "A Framework for the Evaluation of Parallel and Distributed Computing Education Resources", in *Proceedings of the 34th IEEE International Parallel and Distributed Processing Symposium, EduPar NSF/TCPP Workshop on Parallel and Distributed Computing Education*, May 18, **2020**.
- I. Sachkov, V. Turygina, and **V. Ford**, "Development of FEM Programs for Assessing the Risk of Electrical Breakdown of Devices Operating in High Humidity Conditions", in *Proceedings of the 45th International Conference on Application of Mathematics in Engineering and Economics*, 2172, 080013 (**2019**).
- **V. Ford** and A. Siraj, "GenCyberCoin: An Engaging, Customizable, and Gamified Web Platform for Cybersecurity Summer Camps and Classrooms", the Journal of Computing Sciences in Colleges, 35th CCSC-EA, 35.3 (**2019**): 87-96.

- Addleman, H., Bare, Z., Flint, M., **Ford, V.**, Hamm, K., Margolis, L., Miller, K., Oxenford, J., Reinhard, S., Zottola, J., and Zurawski, J., "Arcadia University Bioinformatics Application Deep Dive". 2019. (No. UCPMS-2568399; LBNL-2001317). Lawrence Berkeley National Lab (LBNL), Berkeley, CA.
- EPOC, Arcadia University, KINBER, PennState, "White Paper: Arcadia University Bioinformatics Application Deep Dive", July **2019**.
- A. Tarasyev, **V. Ford**, V. Turygina, and A. Dolganov, "Optimization of Information Resources in The Industrial Ecology", in *Proceedings of the 17th IFAC Workshop on Control Applications of Optimization*, Yekaterinburg, Russia, October 15-19, **2018**.
- I. Sachkov, A. Dolganov, **V. Ford**, and V. Turygina, "The Features of the Presentation of the Topic "Synergism of the Economics" For Students of Information Technologies", in *Proceedings of the 17th IFAC Workshop on Control Applications of Optimization*, Yekaterinburg, Russia, October 15-19, **2018**.
- **V. Ford**, D. Tyler, and A. Siraj, "AMIsim: Application-layer Advanced Metering Infrastructure Simulation *Framework* for Secure Communication Protocol Performance Evaluation", in *Proceedings of the 11th USENIX Workshop on Cyber Security Experimentation and Test*, August 13, **2018**.
- K. Rabieh, M. Pan, Z. Han, and **V. Ford**, "SRPV: A Scalable Revocation Scheme for Pseudonyms-based Vehicular Ad Hoc Networks", in *Proceedings of the IEEE ICC 2018 Communication and Information Systems Security Symposium*, May **2018**.
- **V. Ford**, A. Siraj, A. Haynes, and E. L. Brown, "Capture the Flag Unplugged: An Offline Cyber Competition", in *Proceedings of the ACM SIGCSE (Rank A)*, March 8-11, **2017**.
- **V. Ford**, A. Siraj, and M. A. Rahman, "Secure and Efficient Protection of Consumer Privacy in Advanced Metering Infrastructure Supporting Fine-grained Data Analysis", *Journal of Computer and System Sciences (Rank A*)*, 83.1 (**2017**): 84-100.
- **V. Ford** and A. Siraj, "POSTER: Reliable and efficient protection of consumer privacy in Advanced Metering Infrastructure", Institute for Computer Sciences, Social Informatics and Telecomm. Engineering: SecureComm 2015, LNICST 164, pp. 563–566, **2015**.
- C. Cody, **V. Ford**, and A. Siraj, "Decision Tree Learning for Fraud Detection in Consumer Energy Consumption", in *Proceedings of the 14th IEEE International Conference on Machine Learning and Applications*, December 9-11, **2015**.
- **V. Ford**, "POSTER: Reliable and efficient protection of consumer privacy in Advanced Metering Infrastructure", New York Institute of Technology Annual Cybersecurity Conference, September 24, 2015.
- **V. Ford**, A. Siraj, and W. Eberle, "Smart Grid Energy Fraud Detection Using Artificial Neural Networks", in *Proceedings of the 2014 IEEE Symposium Series on Computational Intelligence*, December 9-12, **2014**.
- **V. Ford** and A. Siraj, "Applications of Machine Learning in Cyber Security", in *Proceedings of the 27th International Conference on Computer Applications in Industry and Engineering*, October 13-15, **2014**.
- **V. Ford** and A. Siraj, "Clustering of smart meter data for disaggregation", in *Proceedings of IEEE Global Conference on Signal and Information Processing*, December 3-5, **2013**.

UNIVERSITY CONTRIBUTION

Administrative Experience, Faculty Committees, Service

Arcadia University, Glenside, PA.

1. Member, Compensation Task Force (fall 2025 – **Present**).
2. Member
3. Member, CS&Math Department ABRI group (fall 2020 – **Present**).
4. Member, Accessibility Committee (fall 2020 – **Present**).
5. Member, Outreach Team for the Computer Science and Math Department (fall 2017 – **Present**).
6. Member, Web Design Advisory Group: worked on revising RFP, interviewing and selecting a vendor, advising the staff, fixing web issues (summer 2019 – 2023).
7. Chair, CS Faculty Search Committee (fall 2022 – spring 2023).
8. Member, Faculty Senate and Finance Committee (fall 2020 – spring 2022).
9. Member, Work & Welfare Committee (fall 2019 – spring 2020).
10. Member, Search Committee for the Infrastructure and Security Analyst (spring 2020).

11. Member, Search Committee for the Administrative Assistant at Computer Science and Math Department (May – June 2019).
12. Member, Provost Search Committee (fall 2018 – spring 2019).
13. Member, Faculty Advisory Committee for the Office of the President: worked on development of strategies to move Arcadia forward, vision review (fall 2018 – spring 2019).
14. Member, Self-Study Evaluation Team for the Computer Science and Math Department (fall 2018).

Arcadia University Grants

- Arcadia University ITC Grant, "Expanding University Virtual Reality Capabilities", Collaborator, funding: $3,522.00. April 2022.
- Arcadia University ITC Grant, "Advancing Curriculum with Visual Technological Innovations", Project Director, funding: $2,760.66. November 2018.
- Arcadia University Summer Camp Grant, "Artificial Intelligence: Exploring a Smart World", Project Director, funding: $9,000.00. December 2017.
- Arcadia University ITC Grant, "Obtaining State-of-the-Art Tech Equipment for Curriculum Enrichment", Project Director, funding: $3,734.00. November 2017.

Other University Contributions

- Coordinator, collaborator, and mentor for numerous interdisciplinary projects on campus, such as data analysis for business and virtual reality for physical therapy. Every year.
- Early Innovator, "Advancing Retention through Career Development, Advising, Data Infrastructure, and Inclusive Excellence at Arcadia University", 2023 – 2024.
- External Review Board member for "The Compass" journal at Arcadia. 2018 – **Present**.
- Invited guest speakers from the industry to give talks in our courses. 2017 – **Present**.
- Worked on revamping Computer Science and Math department website. 2018 – **Present**.
- Established an academic partnership with Fortinet for certification preparation. 2024.
- Member of student success hub faculty early innovator group (integrating Salesforce platform into advising processes), 2023 – 2024.
- Presented at "ChatGPT – Classroom Friend, Foe, Neither, or Both?" talk. Feb. 2023.
- Presented "How Hackers Hack" talk for first-year students in fall 2021.
- Active member of the group developing the data science major, fall 2020 – spring 2021.
- Established a relationship with Amazon Web Services (AWS) on campus through their AWS Educate program, allowing faculty and students to have a certain number of free cloud-based resources (computations/storage/virtual/etc.)
- Presented on Canvas applications and utilization for faculty and staff. Fall 2019.
- Developed a new course in cybersecurity: Introduction to Practical Security Assessment. The pilot course ran during spring 2019.
- Presented talks on machine learning and artificial intelligence in the sports management class every year since 2019.
- Participated in Arcadia's Vision development. January 2019.
- Organized activities/workshops for Arcadia's junior faculty. Fall 2019 – spring 2020.
- Presented on Canvas Applications and Utilization for faculty and staff, Nov. 14, 2019.
- Part of our departmental group who are looking into external marketing of our programs.
- Active member of the group developing data analytics minor, fall 2019 – spring 2020.

COMMUNITY SERVICE

- Faculty-Student Summer Research, Department of Computer Science & Mathematics, Arcadia University, June – August, 2022 – **Present**.
- Coached and mentored Arcadia programming student teams and brought them to the competitions in other cities (weekly meetings). Fall 2018 – **Present**.
- Coached and mentored student cybersecurity teams for participating in the National Cyber League competition in fall and spring (weekly meetings). 2017 – **Present**.
- Arcadia Open House / Scarlet and Grey Day participation. Fall 2017 – **Present**.
- Coached a team from psychology department to participate in a social engineering competition. The team placed 2nd. Fall 2020.
- Computer Science and Math High School Outreach Events at Arcadia: Fall 2018, Spring 2019.
- Organized and presented talks on computer science topics in local middle and high

schools (2-3 per semester). Baldi Middle School and Lower Merion High School. Fall 2018 – fall 2021.
- Established a professional connection with Sabre Solutions in Spring 2018 (cybersecurity division) that led to 4 of our students to get hired as interns, 3 of which for full-time.
- Organized a trip to Comcast for our department's students, January 2018.

PROFESSIONAL DEVELOPMENT

- Bug bounty hunter. Reported an authentication bug that was fixed in the Critical Patch Update of Oracle Cloud, 2023 (https://www.oracle.com/security-alerts/cpujul2023.html)
- AWS Academy Graduate – Cloud Architecting (towards Cloud Solutions Architect). December 2022.
- AWS Academy Graduate – Machine Learning. November 2021.
- ABRI/JEDI webinars and talks online. Fall 2021 – spring 2022.
- Attended ABET computer science accreditation workshop, MD, November 4, 2019.
- iPDC Summer Institute for Integrating Parallel and Distributed Computing in Introductory Programming Classes, Tennessee Tech University, June 17-21, 2019.
- NSF CC* and CICI PI Workshop participant, Sep. 24-26, 2018 and Sep. 23-25, 2019.
- GenCyber Fall Meeting presentation on GenCyberCoin project, September 20-21, 2018.
- Lightning talk at Women in Cybersecurity Conference, March 2018.
- New Educators Workshop at ACM SIGCSE, February 2018.
- Collaborating on Curriculum Development Workshop at Arcadia University, Jan. 2018.
- Faculty development in teaching, leadership, and scholarship at the Center for Teaching and Learning Excellence at Tennessee Tech University. Fall 2016.

COMPETITIONS

- Placed 2nd at the OWASP Hartford Secure Coding Tournament, May 2020.
- Trained National Cyber League team that placed 2nd in the Silver Bracket among 266 teams (29th out of 922 teams overall → top 3%).
- Trained Collegiate Penetration Testing Competition team that won the Best Open Source Intelligence award at the National ICPC 2016.
- Capture The Flag participant, 2014-2017: NCL, CSAW, CONFidence, NotSoSecure.
- Participated as one of the top 8 teams in the southeast region in the Southeast Collegiate Cyber Defense Competition, 2014-2015. Was responsible for training the team, Incident Response, Maintaining Ecommerce and Web services, Linux administration.
- National Cyber League 2013. First place in the 1st individual game, Silver Bracket. Third place in the team game, Silver Bracket.
- Symantec Cyber Readiness Challenge, ISSA, October 2013.

VOLUNTEER ACTIVITY

- Moderator of Microsoft-WiCyS webinars, 2023 – 2024.
- Cybersecurity and IT-related help for elders, 2017 – Present.
- Community College Cyber Summit (3CS), lead volunteer, Summer 2016, 2017.
- Women in Cybersecurity Conference, member of the organizing committee, 2014 – 17.
- ISSA InfoSec international conference volunteer, Fall 2013, Fall 2015.
- NCWIT Aspirations in Computing Award, Spring 2013, Spring 2014.
- STEM programming activities for middle school students volunteer, Spring 2014.
- South-East Women in Computing conference volunteer, Fall 2013.
- ACM programming contest volunteer, Fall 2012, Fall 2013, Fall 2014, Fall 2015.
- High School award ceremony volunteer, Spring 2013.

LANGUAGES

Native Russian, fluent written and verbal English. Very basic Mandarin.

NOTABLE PROJECTS

GenCyberCoin: https://github.com/vitalyford/gencybercoin
TeachCyber Library: https://teachcyber.vford.com
Secure Coding CTF: https://ctf.vford.com
Multiple data structures and security projects and exercises: https://github.com/vitalyford/
Zero-trust infrastructure with 30+ apps via Cloudflare: https://vford.cloudflareaccess.com

FAVORITE TECH

Core languages: Java, Python, Rust, C++, TypeScript (React/Next.js), bash…
Cloud DevOps & DevSecOps: AWS, GCP, Cloudflare, Vercel, Supabase…
Tools: Docker, Kubernetes, Terraform, Git, Kali… it goes on because

I have worked on numerous projects with various tech, in both hardware and software, built tools, automated things, built zero-trust networks, provided advanced tech & security support and consulting to software startups and IT management companies, and used a whole lot of frameworks, libraries, software, and cybersecurity tools.