

George Corser, PhD

2974 Vido Drive, Saginaw, MI 48603, (989) 780-3168, gpcorser@svsu.edu

SUMMARY

- **Teaching:** Web/mobile application development
- **Research:** Vehicular ad-hoc network (VANET) location privacy, Internet of Things (IoT) security

EDUCATION

- **PHD**, Computer Science and Informatics, [Oakland University](#), Rochester, Michigan, 12/2015
- **MS**, Computer Science and Information Systems, [University of Michigan-Flint](#), Flint, Michigan, 8/2011
- **BSE**, Civil Engineering and Operations Research, [Princeton University](#), Princeton, New Jersey, 6/1985

EXPERIENCE

ASSISTANT PROFESSOR, Computer Science and Information Systems (CSIS)
[Saginaw Valley State University \(SVSU\)](#), University Center, Michigan, **7/2014 to present**

- **Teaching:** Teaches eight 4-credit courses per year. Maintains 4.4 overall quality rating at [RateMyProfessors.com](#).
 - *CIS-255*: Client Side Web App Development (HTML/CSS/JavaScript/jQuery/AngularJS)
 - *CIS-355*: Server Side Web App Development (PHP/MySQL, CodeIgniter)
 - *CS-116*: Computer Programming I (Java, C++)
 - *CS-160*: Microcomputer Software (MS-Office2016:Word/Excel/PowerPoint/Access)
 - *CS-403*: Mobile App Development (Android)
 - *CS-461*: Theory of Computation (mathematical proofs)
- **Research:** Leads research in VANET and IoT security/privacy. Serves on doctoral advisory committees of four PhD students at Oakland University. Led the development of web-based vehicular privacy protocol visualization tool, [VisuTrace](#). In first three academic years at SVSU, published six scholarly works as lead author.
 - *Dissertation*: Wrote, defended and published dissertation, which was nominated for Outstanding Dissertation Award
 - *Journal paper*: Published as lead author a journal paper in IEEE Transactions on Intelligent Transportation Systems which was nominated for 2016 Caspar Bowden PET Award
 - *White paper*: Elected by peers to serve as project leader and lead author of a white paper for the IEEE Internet Initiative
 - *Conference paper*: Led undergraduate team under an NSF-funded Research Experience for Undergraduates (REU) grant in vehicle network research at Oakland University, leading to IEEE conference paper publication with undergraduate co-authors
 - *Conference paper*: Published IEEE conference paper with SVSU undergraduate co-author
 - *Professional society article*: Published article in IEEE IoTTechNews
- **Service:** Leads local outreach and community enrichment activities.
 - *Organizer*, [TEDxSVSU](#), TED Talks, 2015, 2016
 - *Faculty Adviser*, [Google IgniteCS](#), middle school computer science education mentoring, 2016
 - *Lead Volunteer*, [Hour of Code](#), computer science education mentoring, 2014-2017
 - *Campus Security Authority (CSA)*, SVSU, 3/2017 to present
 - *Floor Representative*, SVSU Faculty Association, 2/2017 to present
 - *Inclusion Advocate*, SVSU, 10/2016 to present
- **Grants:** Won four SVSU grants as Principal Investigator (PI).
 - *SVSU Foundation Resource Grant*, TEDxSVSU, \$5500
 - *SVSU Undergraduate Research Program Grant*, Safety-Silence Tradeoff Equation, \$1000
 - *SVSU Faculty Research Grant*, VANET Privacy, \$3260
 - *Herbert H and Grace Dow Professor Award*, Collaborative Computer Science Education, \$5000.
- **Professional practice:** Leads teams of paid and volunteer professional and student programmers in the development of mobile/web apps for nonprofit organizations. Sample accomplishments:
 - *MFSM*, Marshall M Fredericks Sculpture Museum, mobile app on [Google Play](#) and pending on Apple App Store
 - *FIRST Robotics in Michigan*, [web app](#) for volunteers at statewide competition

INSTRUCTOR, Computer Science and Engineering, and Criminal Justice departments
[Oakland University](#), Rochester, Michigan, Fall, 2012, and Winter, 2014

- Taught part time, concurrent with PhD studies. Official title was Teaching Assistant, but I taught the courses. Achieved 5.0 overall quality rating at [RateMyProfessors.com](#).
 - CIS-448: Information Security Practice
 - CRJ-341: Cybercrime

PUBLICATIONS

Publications numbered in chronological order by publication date, but listed in reverse chronological order.

16. **Corser, G.**, Masasabi, M., Kivari, L., Fu, H. (2017, **in press**). Properties of vehicle network privacy. Michigan Academician. (**Journal paper**)
15. **Corser, G.** (2017, August). Why IoT security is so important - and what to do about it. IoT Tech News. 4 August 2017. [Web](#). IEEE.
14. **Corser, G.**, Banihani, A., Cox, J., Hoque, R., Fu, H. (2017, July). Location privacy, application overhead and congestion in VANET location based services. In 2017 IEEE 3rd International Conference on Big Data Security on Cloud (BigDataSecurity), IEEE International Conference on High Performance and Smart Computing, (HPSC) and IEEE International Conference on Intelligent Data and Security (IDS), Beijing, China, 2017, pp. 243-248. IEEE. [doi: 10.1109/BigDataSecurity.2017.52](#) (**PDF**)
13. **Corser, G.**, Fink, G., Aledhari, M., Bielby, J., Nighot, R., Mandal, S., Aneja, N., Hrivnak, C., and Cristache, L. (2017). Internet of Things (IoT) security best practices [White paper]. Retrieved May 19, 2017, from IEEE Internet Initiative: http://internetinitiative.ieee.org/images/files/resources/white_papers/internet_of_things_feb2017.pdf
12. **Corser, G. P.** (2016). Securing location privacy in vehicular applications and communications (**Doctoral dissertation**, Oakland University). (**PDF**) (**Nominated for Outstanding Dissertation Award**)
11. **Corser, G.**, Fu, H., and Banihani, A. (2016). Evaluating location privacy in vehicular communications and applications. **IEEE Transactions on Intelligent Transportation Systems**, 17(9), 2658-2667. [doi: 10.1109/TITS.2015.2506579](#) (**Journal paper**. **Nominated for 2016 Caspar Bowden PET Award.**) (**PDF**)
10. **Corser, G. P.**, Arenas, A., and Fu, H. (2016, February). Effect on vehicle safety of nonexistent or silenced basic safety messages. In Computing, Networking and Communications (ICNC), 2016 International Conference on (pp. 1-5). IEEE. [doi: 10.1109/ICNC.2016.7440550](#)
9. Gurary, J., Zhu, Y., **Corser, G.**, Oluoch, J., Alnhash, N., and Fu, H. (2015, November). Maps: A multi-dimensional password scheme for mobile authentication. In Proceedings of the 2015 International Conference on Interactive Tabletops & Surfaces (pp. 409-412). ACM. [doi: 10.1145/2817721.2823479](#)
8. **Corser, G.**, Fu, H., Shu, T., D'Errico, P., Ma, W., Leng, S., and Zhu, Y. (2014, June). Privacy-by-Decoy: Protecting location privacy against collusion and deanonymization in vehicular location based services. In Intelligent Vehicles Symposium Proceedings, 2014 IEEE (pp. 1030-1036). IEEE. [doi: 10.1109/IVS.2014.6856595](#)
7. Alnhash, N., **Corser, G.**, Fu, H. (2014, April). Protecting Vehicle Privacy using Dummy Events. In 2014 American Society For Engineering Education North Central Section Conference. ASEE NCS 2014. (**PDF**)
6. Oluoch, J., **Corser, G.**, Fu, H., Zhu, Y. (2014, April). Simulation Evaluation of Existing Trust Models in Vehicular Ad Hoc Networks. In 2014 American Society For Engineering Education North Central Section Conference. ASEE NCS 2014. (**PDF**)
5. Alrajei, N., **Corser, G.**, Fu, H., Zhu, Y. (2014, February). Energy Prediction Based Intrusion Detection In Wireless Sensor Networks. International Journal of Emerging Technology and Advanced Engineering, Volume 4, Issue 2. IJETAE. (**PDF**) (**Journal paper**)
4. **Corser, G.**, Fu, H., Shu, T., D'Errico, P and Ma, W. (2013, December). Endpoint protection zone (EPZ): Protecting LBS user location privacy against deanonymization and collusion in vehicular networks. In Connected Vehicles and Expo (ICCVE), 2013 International Conference on (pp. 369-374). IEEE. [doi: 10.1109/ICCVE.2013.6799822](#)
3. **Corser, G. P.**, Arslanturk, S., Oluoch, J., Fu, H., and Corser, G. E. (2013). Knowing the Enemy at the Gates: Measuring Attacker Motivation. In International Journal of Interdisciplinary Telecommunications and Networking (IJITN), 5(2), 83-95. [doi: 10.4018/IJITN.2013040107](#) (**Journal paper**)
2. **Corser, G.** (2012, October). A tale of two CTs: IP packets rejected by a firewall. In Proceedings of the 2012 Information Security Curriculum Development Conference (pp. 16-20). ACM. [doi: 10.1145/2390317.2390320](#) (**Best Paper Runner Up Award**)
1. **Corser, G.** (2012, October). Professional association membership of computer and information security professionals. In Proceedings of the 2012 Information Security Curriculum Development Conference (pp. 9-15). ACM. [doi: 10.1145/2390317.2390319](#) (**Best Student Paper Runner Up Award**)

INVITED TALKS AND SPECIAL CONFERENCES

- [Invited speaker](#), IEEE End to End Trust and Security Workshop for the Internet of Things in Washington, DC (February, 2016)
- [Invited researcher](#), Intel Corporation Automotive Security Review Board meet-up at Automotive Cyber Security Summit in San Francisco (October, 2015)
- [NSF travel grant winner](#), Workshop for Aspiring PIs in Secure and Trustworthy Cyberspace (August, 2014)