

## Caleb Donovanick

Ph.D. Student in Computer Science, admitted Autumn 2016

### Publications

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#### PUBLICATIONS

- **Smt-Switch: A Solver-Agnostic C plus plus API for SMT Solving**  
Mann, M., Wilson, A., Zohar, Y., Stuntz, L., Irfan, A., Brown, K., Donovanick, C., Guman, A., Tinelli, C., Barrett, C., Li, C. M., Many, F.  
SPRINGER INTERNATIONAL PUBLISHING AG.2021: 377-386
- **EnsembleHMD: Accurate Hardware Malware Detectors with Specialized Ensemble Classifiers** *IEEE TRANSACTIONS ON DEPENDABLE AND SECURE COMPUTING*  
Khasawneh, K. N., Ozsoy, M., Donovanick, C., Abu-Ghazaleh, N., Ponomarev, D.  
2020; 17 (3): 620–33
- **Creating an Agile Hardware Design Flow**  
Bahr, R., Barrett, C., Bhagdikar, N., Carsello, A., Daly, R., Donovanick, C., Durst, D., Fatahalian, K., Feng, K., Hanrahan, P., Hofstee, T., Horowitz, M., Huff, et al  
IEEE.2020
- **fault: A Python Embedded Domain-Specific Language for Metaprogramming Portable Hardware Verification Components** *International Conference on Computer Aided Verification*  
Truong, L., Herbst, S., Setaluri, R., Mann, M., Daly, R., Zhang, K., Donovanick, C., Stanley, D., Horowitz, M., Barrett, C., Hanrahan, P.  
2020
- **Agile SMT-Based Mapping for CGRAs with Restricted Routing Networks** *International Conference on ReConfigurable Computing and FPGAs*  
Donovanick, C., Mann, M., Barrett, C., Hanrahan, P.  
2019
- **Hardware-Based Malware Detection Using Low-Level Architectural Features** *IEEE TRANSACTIONS ON COMPUTERS*  
Ozsoy, M., Khasawneh, K. N., Donovanick, C., Gorelik, I., Abu-Ghazaleh, N., Ponomarev, D.  
2016; 65 (11): 3332–44
- **Malware-Aware Processors: A Framework for Efficient Online Malware Detection**  
Ozsoy, M., Donovanick, C., Gorelik, I., Abu-Ghazaleh, N., Ponomarev, D., IEEE  
IEEE.2015: 651–61
- **Ensemble Learning for Low-Level Hardware-Supported Malware Detection** *International Symposium on Recent Advances in Intrusion Detection*  
Khasawneh, K. N., Ozsoy, M., Donovanick, C., Abu-Ghazaleh, N., Ponomarev, D.  
2015: 3–25