

# Oliver Jensen

3513 Ross Road, Ames IA 50014 ▪ [career@ojensen.net](mailto:career@ojensen.net) ▪ +1 512 609 0502

Education	<b>University of Texas at Austin, Austin, TX</b>	
	Ph.D. (Computer Science; MCD Fellowship) Master's of Science (Computer Science; minor in Electrical Engineering)	2010 – 2017 2010 – 2013
	<b>Colgate University, Hamilton, NY</b>	
	B.A. Magna Cum Laude (Computer Science; Mathematics)	2005 – 2009
Relevant Skills	<b>Preferred Programming Languages:</b> <ul style="list-style-type: none"><li>• Python</li><li>• Rust</li><li>• Javascript</li><li>• PHP</li></ul>	<b>Web Application Development:</b> <ul style="list-style-type: none"><li>• Flask, Django, PHP, Actix, Gotham</li><li>• SQL / Database Structure</li><li>• HTML5 / JavaScript / Closure</li></ul>
	<b>Platforms:</b> <ul style="list-style-type: none"><li>• Linux (Arch, Gentoo, Debian)</li><li>• AWS (EC2, Lambda, S3, CloudFormation)</li><li>• Apache / NGINX</li><li>• Windows</li></ul>	<b>Other:</b> <ul style="list-style-type: none"><li>• Threat-modeling</li><li>• Security assessments / pentests / BurpSuite</li><li>• Teaching / training / public speaking</li><li>• Research / writing</li><li>• Digital mischief</li></ul>
Work Experience	<b>Workiva, Inc. – Staff Security Engineer</b>	<b>2017 – Present</b>
	Spearheaded the successful removal and prevention of secrets committed to source code via development of in-house tool to alert on strings with high Kolmogorov complexity as potential secrets. Overhauled and now responsible for all security-related training, including new-hire training, annual awareness, phishing simulations, and security reviewer certification. Leads projects to incorporate threat-modeling into the SDLC, and to publish strict DMARC policies. Also engages in tool development, pentests, reviews, incident response, etc.	
	<b>Praetorian, Inc. – Intern</b>	<b>Summer 2016</b>
	Engaged in security assessments for several high-profile clients, including a bank, a space telescope institute, an IoT device manufacturer, and others. Led a small group building a crowd-sourced IoT mapping project targeting non-Internet-connected IoT devices.	
	<b>Google, Inc.</b>	<b>2015, 2014, 2013, 2012, 2011</b>
	<ul style="list-style-type: none"><li>• <b>2015: Gmail Security</b> – Software Engineering Intern Developed and shipped a client-side HTML sanitizer for use across Google products, resolving inconsistencies and limitations caused by each product inventing their own. Compact, performant, and leveraging modern features of HTML5, it was deployed widely across Google properties.</li><li>• <b>2014: Red Team</b> – Intern Engineering Software * Created Tamper Chrome (<a href="https://github.com/google/tamperchrome">https://github.com/google/tamperchrome</a>) based on previous work by Eduardo Vela to allow inspection and modification of any chrome request. Pentested various vendor products, and created an educational tool to help teach the basics of web-security. <i>* not a typo – found that job titles could be overwritten during pentest of the employee lifecycle solution</i></li><li>• <b>2013: Incident Response</b> – Software Engineering Intern Contributed to PLASO, an open-source digital forensics tool, implementing numerous performance improvements. Created PLASM, an output processor for PLASO to infer tags, groups, and clusters from PLASO output by occurrence and frequent neighbor associations.</li><li>• <b>2012 and 2011: Adwords API</b> – Software Engineering Intern Created a non-writing “shadow” API harness, allowing two versions of the API to be run simultaneously for result comparison. Created a logs-parsing system to aggregate Adwords data from disparate sources, providing insight on how 3rd party resellers affect sales. Engaged in an internal pen testing project.</li></ul>	

<b>Entrepreneurial Experience</b>	<b>MycenaCave.com</b> – Founder / Developer / Owner	<b>2013 – Present</b>
	Mycena Cave is an online community and social gaming website, encouraging self-expression through creative writing and digital art. It embodies a digital collectibles aspect, allowing players to represent and customize their creations. It consists of a web application built in PHP (forums, private messaging, profiles, etc.), a number of HTML5 browser games, a (now defunct) websocket chat app written in Python, and a fairly advanced image processing stack written in Rust. The team consists of two co-owners and 25 paid staff.	
	<b>Whimventory.com</b> – Founder / Developer / Owner	<b>2009 – 2016</b>
	Whimventory was an online “universal wishlist” service, before such things were really a thing. Written in PHP on the CodeIgniter framework and leveraging the jQuery Javascript library, it provided a simple, clean, and universal interface for adding any product for sale on the Internet to a unified wishlist. Primarily making money off of affiliate links, it did well for a bit, coasted for a while after Amazon released their own version, and finally shut down in 2016. Sadly the domain is now owned by a Turkish gambling website. So it goes.	
<b>Publications and Research</b>	<b>Architecture of a Mobile Payment System (Dissertation)</b>	<b>University of Texas 2017</b>
	Oliver Jensen, Mohamed Gouda	
	<b>Securing NFC Credit Card Payments from Malicious Retailers</b>	<b>NETYS 2016</b>
	Oliver Jensen, Tyler O’Meara, Mohamed Gouda <i>In Proceedings of The International Conference of Networked Systems (NETYS)</i>	
	<b>A Secure Credit Card Protocol over NFC</b>	<b>ICDCN 2016</b>
	Oliver Jensen, Mohamed Gouda, Lili Qiu <i>In Proceedings of The International Conference on Distributed Computing and Networking (ICDCN)</i>	
	<b>Model-Driven Energy-Aware Rate Adaptation</b>	<b>MobiHoc 2013</b>
	<i>International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc)</i> Muhammad Owais Khan, Vacha Dave, Yi-Chao Chen, Oliver Jensen, Lili Qiu, Apurv Bhartia, Swati Rallapalli	
	<b>Additional research includes:</b> <ul style="list-style-type: none"> <li>• Demonstrated eavesdropping of NFC communication, harvesting and decoding credit card information</li> <li>• Cracked the ST-25b “rolling-code” voice scrambling scheme used by the NFL until August 2012</li> <li>• Examined Braess’ Paradox in autonomous vehicular traffic networks, exploring a microtolling mitigation</li> <li>• Investigated traceroute data integrity and route concealment attacks in the wild</li> </ul>	
<b>Teaching Experience</b>	<b>University of Texas at Austin</b> – Adjunct Associate Professor	<b>2020</b>
	<ul style="list-style-type: none"> <li>• CS 314H: Data Structures and Algorithms (honors)</li> </ul>	
	<b>University of Texas at Austin</b> – Assistant Instructor	<b>2014 – 2016</b>
	<ul style="list-style-type: none"> <li>• CS 361S: Network Security and Privacy</li> </ul>	
	<b>University of Texas at Austin</b> – Graduate Teaching Assistant	<b>2010 – 2014</b>
	<ul style="list-style-type: none"> <li>• CS 305J: Introduction to Computing</li> <li>• CS 307: Foundations of Computer Science</li> <li>• CS 314H: Data Structures and Algorithms (honors)</li> <li>• CS 371P: Object Oriented Programming</li> <li>• CS 378: The Computational Brain</li> </ul>	
<b>Hobbies</b>	I play a bunch of instruments, including the violin, the banjo, the autoharp, and the concert zither; I’m trying to figure out the guitar and balalaika too, but those are very much a work in progress. I also enjoy hacking, backpacking, snowboarding, and electrical tinkering on breadboards. Colgate Men's Varsity Crew (rowing), Eagle Scout. Spoken languages include English (native), French (once-fluent), German (conversational), Spanish (rusty).	