

Jeff Chen

jeffrey@cmu.edu ✉
Dublin, CA 📍
(925) 699 5663 ☎
jeff.yt 🌩

🎓 EDUCATION

Carnegie Mellon Class of 2016 – B.S. Computer Science – 3.4/4.0

- Minor in Human-Computer Interaction
- Relevant coursework: Algorithm Design and Analysis, Cloud Computing, Cognitive Robotics, Complexity Theory, Human-Robot Interaction, Interaction Design Overview, Science of the Web
- Track and field school record holder

💼 EXPERIENCE

National Security Agency – Stokes Scholar

Holder of TS//SCI clearance with special background investigation and polygraph

Trusted Systems

Summer 2015

- Designed and implemented a software keyboard for Android devices that operates in the TrustZone secure environment
- Ported IMA (Integrity Measurement Architecture) to Android
 - Partially implemented the Trusted Platform Module (TPM) standard in the TrustZone secure environment
 - Developed a kernel driver to interface with the software TPM
 - Wrote a secure application to cryptographically sign the IMA measurement list
 - Created a system service enabling Android remote attestation

Data Network Technologies

Summer 2014

- Designed and developed CNE operations tool for collection of computer-to-computer communications
- Designed and implemented secure communications protocol

Remote & Deployed Operations

Summer 2013

- Developed Windows anti-malware software
 - Used infection markers to enable lightweight, fast, and accurate detection and neutralization of known malware
 - Heuristically analyzed and tagged potential infection markers
- Created an intuitive network traffic visualizer, allowing analysts to more easily notice anomalous behavior

</> SELECTED PROJECTS

April 2015	Created espresso , a deep learning framework designed to produce maintainable yet highly performant code compatible with Caffe.
Feb 2014	Created MiniPlay , a Chrome extension adding functionality to web music players with over 1000 daily users.
Aug 2013	Built a dynamic threadpool in modern C++11 to fill the gap in the C++ STL between <code>std::async</code> and <code>std::thread</code> .
2010-2012	Led development of eva , software for an autonomous submarine, incorporating computer vision, state machines, and control systems.

🔧 SKILLS

Languages	C++14 • C • Java • Javascript • Python • x86 • Rust
Technologies	Cryptosystem design • *nix kernel development • OpenMP/Open MPI • SIMD • CUDA/OpenCL • OpenCV • Embedded systems
Internet	HTML • SASS/CSS • Angular.js • Node.js • Socket.IO • jQuery • MongoDB