CHRISTOPHER NGO

- GitHub: ingochris
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SKILLS

ATTACK: BURP, CAINE, Hydra, Kali Linux, Metasploit, NESSUS, Nexpose, Wireshark, ZAP, CWE 25, OWASP 10

DEFENSE: ACL, COBIT, EnCase, Fiddler, FTK, IDS/IPS, NIST, Nmap, SIEM, Splunk ES

CLOUD: Amazon AWS, Google Cloud, Microsoft Azure

DATA: Mongo, MySQL, Reddis

GNU/LINUX/UNIX: AWK, BASH, CIFS/SMBFS, GIT, KS, NFS, PXE, RAID, REGEX, ZSH

NETWORK: Cisco IOS + TTL, Firebug, OSI Model, Routing, Switching, Subnetting

SYSADMIN: AD, Ansible, Chef, Docker/Kubernetes, Heroku Microservices, LDAP, MS 365, NGINX, Puppet, Splunk, ELK

VIRTUAL: VirtualBox, VMware Player, vSphere ESXI

WEB DEV: Flask, HTML/CSS, JS, jQuery, LAMP, MEAN

HONORS

Top 5% of RITx Computer Forensics (21,680 Students)

Winner of GitHub HackUK Hack Quarantine 2020

Winner of Caltech Hacktech Security Challenge CTF 2020

Winner of Stanford Cybersecurity TreeCTF 2018

Winner of Stanford TreeHacks Hackathon 2018

Winner of PayPal WWC Hackathon 2017

Winner of Silicon Valley Hackathon 2016

Winner of HackingEDU Hackathon 2015

Winner of UCSBHacks FLIR Security Challenge 2014

Winner of USC HackSC Microsoft Code 2013

EDUCATION

Rochester Institute of Technology (RITx)
Cybersecurity

Stanford University Online
Computer Science

Mission Community College
Information Systems

ENGINEERING EXPERIENCE

Silicon Dev Linux Support Engineer at MICROSOFT (AMS)   Feb 2021 - Present
- **Automate [*BASH|Python*]:** Build Azure Cloud and on-premises systems for *Hololens, Quantum, Xbox*
- **Sysadmin:** Manage engineering compute infrastructure of **8,000+ systems** and **1,500+ users**
- **Security:** Founded and led internal Microsoft Security Interest Dev Group CTF Team (**120+ members**)

Technical Consultant (Development & Training) at INCT   May 2017 - Feb 2021
- **Consulting:** Worked with clients in IT planning, product strategy, and software development
- **Security:** Top 15 Cybersecurity CTF Penetration Testers[*MIT Cambridge2Cambridge National, 2017*]
- **Training:** Led on-site development classes and engagements to technical audiences (**2,000+ attendees**)

Test Automation Engineer Lead (NPI & Sustaining) at QUANTA Jul 2015 - May 2017
- **Development [*BASH|C|Cisco TeraTerm/BASIC|Perl|Python|SQL*]:** Wrote and released automation software suites for integrated L10-L11 rack server system white-box tests and reduced time-cost by **>99%** in mass-production and firmware deployment: *BIOS, BMC, CMC, FRU, HDD, Intel ME, NIC, RAID, SSD, TPM*
- **Lead (Server Team):** Delegated, mentored, and trained team of **8 Junior Engineers** + **20 Lab Technicians**
- **Network Architecture:** Built 40GbE/100GbE lab networks from scratch linking client datacenters using *Arista EOS, Cisco IOS, Delta ONIE, Facebook/OCP FBOSS, Juniper Junos OS, Palo Alto Networks Firewalls*
- **New Product Integration:** Defined product test life cycles with customers and shipped **>2,000,000 units** in 10 Hyperscale Compute Projects: *Amazon AWS, EMC VxRail, Facebook CDN, Google Cloud, Microsoft Azure & Bing, OCP, QCT STRATOS, QuantaGrid, QuantaPlex, QxStack VMware EVO SDDC*

Customer Support Engineering Intern at VIOLIN MEMORY   Oct 2013 - Jun 2014
- **Support Engineering [*BASH|Python*]:** Manage callhome modules of **80+ storage systems** (FFA Flash Fabric Architecture) for customer production and internal R&D remotely via SSH
- **Salesforce Admin:** Built and managed company-wide CRM (Customer Relationship Management) custom dashboards for account, case, and knowledge base data with custom plugins for **240+ employees**
- **Sharepoint Admin:** Spearheaded company data migration project from cloud to on-prem servers

Developer, Technician, Webmaster at CYBER SHOP   Jan 2006 - Oct 2013
- **Apps [*C BSD PSPSDK|Java ME|Lua|Macromedia Flash|sdlBasic*]:** Wrote system utilities and videogames
- **Embedded Systems:** Root-privilege Jailbreak services to flash custom firmwares/ROMS and homebrew software in mobiles (*Android, iOS, PPC/Windows Mobile, PSP, Sansa, Symbian*) and routers (*DD-WRT*)
- **Sales:** Developed and designed web assets/layouts/plugins for sale (*Myspace, Neopets,* and *Tumblr*)
- **Support:** Hardware/software/network diagnostics, repairs, rebuilds, upgrades & downgrades, and malware/virus removal on GNU/Linux, Mac, and PC on-site and RealVNC (Virtual Network Computing)
- **Web:** [*AJAX|CSS|HTML|JS|PHP*]: Built and updated sites in CMS (Content Management Systems) on *Drupal, Joomla,* and *WordPress* via *Angelfire, Google, Tripod,* and *Yahoo! GeoCities*

EDUCATION ROLES

Cybersecurity TA at CYBRARY   Feb 2020 - Present
- Support students with technical help and instructors with course content (CCNA, Linux, Pentesting)

Consultant (Hacking Instructor) at MAKE SCHOOL   Mar 2017 - Apr 2018
- Coached **900+ students** on hardware/software projects and attended conferences as a speaker
- Taught Introduction to Computer Science and Building Games on iOS (Flappy Bird, Pokémon)

Mentor at HACKER FUND   Mar 2017 - Mar 2018
- Mentored the next generation of leaders in tech to help change lives through code

Champion (Remote Developer Evangelist) at CLARIFAI   Aug 2016 - Nov 2016
- API, public speaking, and technical writing in computer vision, machine learning, deep neural networks

Ambassador (Hardware Programming Teacher) at HACKSTER Aug 2016 - Oct 2016
- Taught hardware programming with Arduino microcontrollers and sensors on C++ codebender IDE

Research Scholar (Privacy & Security) at STANFORD   Sep 2015 - Jun 2018
- Contributed to privacy research talks on machine learning/natural language processing

Stanford University Coordinator at HACKATHON HACKERS   Sep 2014 - Jun 2018
- Led and mentored competitive hackers from Stanford to *Major League Hacking* collegiate hackathons

BOARD POSITIONS

Director at SILICONHACKS (Hacker Fund 501(c)(3) Project)   Dec 2016 - Jul 2018

Technology Director at SPECTRA (YouTube Partner)   Dec 2015 - Jul 2017

Mentorship Director at HACKINGEDU (LLC)   Oct 2015 - Dec 2016

CERTIFICATIONS & CONTINUING EDUCATION

CCNA Cyber Ops SECOPS
Cisco Networks
Computer Forensics
Rochester Institute of Technology
Algorithms: Design and Analysis
Stanford University Online

MongoDB Python Developer
MongoDB University
Cybersecurity Risk Management
Rochester Institute of Technology
Relational Databases: SQL
Stanford University Online

Cybersecurity Fundamentals
Rochester Institute of Technology
Network Security
Rochester Institute of Technology
Unified Modeling Language
Stanford University Online

PERSONAL PROJECTS I AM PROUD OF

AINOMALY - UNIVERSITY OF WATERLOO, CANADA
- Developed security incident response software for CANSOFCOM (Canadian Special Forces) using OpenCV + TensorFlow artificial intelligence, presented to Prime Minister Justin Trudeau

AUTOMATE - UNIVERSITY OF CALIFORNIA, BERKELEY
- Reverse engineered Tinder's API by wireshark network sniffing to automatically analyze, rate, and swipe "selfies" with computer vision

/R/BODYWEIGHTFITNESS - SANTA MONICA, CA
- Build bots, chat, and web servers to grow fitness education community of over **2.2 million subscribers** on reddit (Discord Partner Server)

CHARITYOR.ME - UNIVERSITY OF CALIFORNIA, SAN DIEGO
- Developed to-do list app that punishes overdue tasks by donating money from bank accounts to charities through Venmo API

CISCO JAILBREAK - UNIVERSITY OF CALIFORNIA, SANTA BARBARA
- Analyzed and exploited a vulnerability in Cisco's Mobility Service Engine to circumvent the system's location tracking services security feature

COVIDTIVITY - SABA, REMOTE
- Created award-winning productivity application for remote working in the COVID-19 pandemic in React Native and Expo build framework, designed in Figma

EVERYCHAT - UNIVERSITY OF PENNSYLVANIA
- Reverse engineered Yik Yak API to make real-time chat app powered by Node.js and Socket.io in geolocation fences (Chrome and Comcast)

FEATHERIM - BLOCKCHAIN CONNECT, SILICON VALLEY
- Decentralized light-weight P2P instant messaging and video chat over nkn blockchain network protocol

FISTPUMP - UNIVERSITY OF SOUTHERN CALIFORNIA
- Developed Unity Oculus Rift videogame utilizing Leap Motion sensors for augmented reality; Google Sketchup of 3-D Printed VR peripheral

HF TRANSLATOR - UNIVERSITY OF CALIFORNIA, BERKELEY
- Built a speech-to-speech hands-free translator using Google's Web Speech API for transcription and vocalization, wrapping Google's Translate API

INFINITYENCRYPTION - CALIFORNIA INSTITUTE OF TECHNOLOGY
- Created a new mode of PGP RSA encryption key algorithm seed entropy generation by the Synaptic Telegraphe prototype in Python (Win7 API)

INSTAREACT - UNIVERSITY OF CALIFORNIA, LOS ANGELES
- Automated Instagram with Google Cloud Vision's sentiment analysis machine learning model API, running on React Native with Expo build framework

JUNI - JUNIPER NETWORKS, SUNNYVALE
- Developed an award-winning web-wide scalable AI-enhanced Text-Editor in JavaScript that allows everyone to perform research in an easy and streamlined form-factor

JUSTICEMATCH - PAYPAL, SAN JOSE
- Created an award-winning aggregated social network for easy yet effective social signal-boosts with Facebook, Instragram, and Twitter APIs

NUTRIFEYE - UNIVERSITY OF CALIFORNIA, BERKELEY
- Wrote a phone web app to track user macronutrition intake from camera with Google Cloud Computer Vision and USDA database API

REYODA - UNIVERSITY OF CALIFORNIA, LOS ANGELES
- Created MEAN Stack web app that leverages Mashape's and ReSpoke's RESTful APIs to "Yoda-fy" user messages prior to transmission

SECUREDROP - INTERNET ARCHIVE, SAN FRANCISCO
- Contributed to the open-source software platform for secure anonymous communication between journalists and whistle-blower sources by Freedom of the Press Foundation

SOCIAL-ENGINEER FIREWALL (SEF) - STANFORD UNIVERSITY
- With Houndify NLP, developed the world's first firewall software that protects OSI Level 8 (end-user/human) against Black Hat Social Engineers

SUMMONING SURGE - FACEBOOK, MENLO PARK
- Designed and programmed a multi-dimensional videogame in C#, powered by Unity 5

TOUCAN - "DESIGN THE FUTURE OF WIKIHOW", SAN MATEO
- Programmed an award-winning app in C and JavaScript with CloudPebble to take natural language voice dictation input, scrape wikiHow, and determine best result (Python fuzzy string matching) for smartwatch output