

Gabriel Cruz

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RESEARCH AND EDUCATION

UNIVERSIDADE DE SÃO PAULO

BS IN COMPUTER SCIENCE | [ICMC](#)

Jan 2016 - Jan 2021 (expected) | São Carlos, Brazil

UNIVERSITÉ DE BRETAGNE OCCIDENTALE

RESEARCH EXCHANGE PROGRAM | [UFR SCIENCES](#)

Jan 2020 - June 2020 | Brest, France

- Invited international researcher on cybersecurity
- Developed a Social Engineering framework for conducting practical and safe Phishing experiments
- Organized events for hundreds of people from the LGBTQ+ university West-Up extracurricular group

UNIVERSIDADE DE SÃO PAULO

NETWORK SECURITY RESEARCH | [MONOGRAPHY](#)

Jan 2019 - July 2019 | São Carlos, Brazil

- Implemented and compared two DoS attacks in MQTT networks: SYN Flood and Sybil Subscription Flood
- Provided proof of concept code for the attacks, one of the first studies of the kind in MQTT networks

WORK EXPERIENCE

MAJOR LEAGUE HACKING

MLH FELLOWSHIP INTERN

June 2020 - Aug 2020 (expected) | Remote

- Global summer program sponsored by Github Education to contribute to Open Source projects
- Selected over 20.000 other candidates for the first edition ever of the program
- Contributed to Python and Golang projects: Flask, Golang, Wekzeug, Beego, Httpie, and others
- Worked at the most global group on the entire fellowship, with people from 10 different countries

GANESH SECURITY

COMPUTER NETWORKING GROUP LEAD

Jan 2019 - June 2020 | São Carlos, Brazil

- First member to become a group lead (in 3 months)
- Gave dozens of talks on DoS and MITM attacks, IP Spoofing, Phishing techniques, among others
- Developed several Capture The Flag challenges on computer networking security (protocols, wifi, handshakes, etc.) for over 150 new members

QUERO EDUCATION

SOFTWARE ENGINEERING TRAINEE | QUERO BOLSA

Jul 2018 | São José dos Campos, Brazil

- First amongst over 100 candidates
- Developed a real-time statistics and data visualization web app using Elixir's Phoenix web framework
- Deployed the application as a real-time statistics dashboard seen daily by every employee

PROJECTS

IPV6 WORKSHOP LEAD | [SLIDES](#), [MATERIAL](#)

- IPv6 workshop for more than 30 students and professors at Universidade de São Paulo
- Simulated realistic scenarios and developed practical exercises to reinforce the learning process
- Covered topics such as history of IPv6, public, private, unicast and multicast addresses

HEROES BUILD SCRAPER | [GITHUB REPO](#)

- Python web scraper for a MOBA game informations
- Gets content from a website using BeautifulSoup and displays it in-game through a Qt window
- Contributed with 7 other people through GitHub and participated in DigitalOcean's Hacktoberfest program for Open Source development

SECURITY WORKSHOP LEAD | [SLIDES](#), [MATERIAL](#)

- Gave a course on DoS attacks for more than 50 people at the biggest computer science undergraduate event of Brazil: Semcomp
- Covered amplification techniques, botnets, peer-to-peer networks, TCP and UDP flooding, etc

SKILLS

TECHNICAL | PROGRAMMING AND TOOLS

OVER 2 YEARS:

Python • C • Shell script
Linux/Unix • Git • Vim/Neovim • Numpy

OVER 6 MONTHS:

Go • C++ • Elixir • Javascript • Java • Assembly
GDB • Wireshark • BeautifulSoup

NATURAL LANGUAGES

Portuguese (native)

English (TOEFL iBT 107/120) • French (DELFB2)

MISCELLANEOUS

AWARDS

- MLH Fellowship: Selected from over 20 thousand candidates at global internship
- Fireshell CTF: 2nd place among over 1000 teams at national CTF challenge
- Interhacks: 3rd place over 30 teams at national hackathon

VOLUNTEER WORK

- Monitor at free university visit for over 50 high school aspiring students
- Mentored 10 kids at a free app development hackathon for children
- Parkour coach for over 20 children in need