Gabriel Cruz

gabrieldemelocruz@gmail.com · /in/gabriel-de-melo-cruz
github.com/gmelodie · gmcruz.me

EDUCATION & RESEARCH

UNIVERSITY OF SÃO PAULO
BS in Computer Science | ICMC
Jan 2016 - Jan 2021 (expected) | São Carlos, Brazil

UNIVERSITY OF WESTERN BRITTANY
Research Exchange Program | UFR Sciences
Jan 2020 - June 2020 | Brest, France

- Invited international cybersecurity researcher
- 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

UNIVERSITY OF SÃO PAULO
Network Security Research | Monograph
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
Open Source Engineer Intern | MLH Fellowship
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 in 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 to over 50 members on DoS and MITM attacks, IP Spoofing, 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

- Selected among 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 hundreds of employees

PROJECTS

IPV6 WORKSHOP LEAD | Slides · Notes

- IPv6 workshop for more than 30 students and professors at University of 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 information
- Retrieves content from a website using BeautifulSoup and displays it in-game through a Qt window
- Contributed with other developers on GitHub through DigitalOcean's Hacktoberfest

SECURITY WORKSHOP LEAD | Slides · Notes

- 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 scripting
  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 (DELF B2)

AWARDS & DISTINCTIONS

- **MLH Fellowship**: Selected among 20.000 candidates at global internship
- **Fireshell CTF**: 2nd place among 1000 teams
- **Interhacks**: 3rd place among 30 teams at national hackathon

VOLUNTEER WORK

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