Andre Cura

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Summary

- A third-year undergraduate student at the University of Toronto with a major in Neuroscience and a minor in Computer Science.
- A software developer with experience in fullstack web development and mobile development.
- An award-winning CTF player with experience in reverse engineering and binary exploitation.
- A leader with experience in organizing and hosting CTF practice sessions, in addition to training new developers.

TECHNICAL SKILLS

Languages: Python, C/C++, SQL (Postgres), JavaScript, TypeScript, HTML/CSS

Frameworks: React, React Native, Expo, Node.js, NestJS, Express.js

Developer Tools: Git, Jira, Bitbucket Pipelines, Docker, AWS (S3, EC2, Elastic Beanstalk), Visual Studio Code,

Ghidra, GDB, x64dbg

Libraries: knex.js, TypeORM, GraphQL, Bootstrap, angr, pwntools, z3

EXPERIENCE

Part-time Software Developer

 $September\ 2021-September\ 2022$

Tasttlig Corporation

Toronto, ON

- Updated and maintained a mobile application that uses React Native and Expo
- Created a new version of the company's full stack application using NestJS, GraphQL, TypeORM, and React with TypeScript
- Implemented new features to the old version of the company's backend application
- Debugged and fixed bugs in the festival application for both the web and mobile versions
- Trained new developers on the company's codebase
- Worked in an agile environment using Jira
- Monitored and maintained the company's CI/CD pipeline using Bitbucket Pipelines

Software Developer Intern

June 2021 - August 2021

November 2021 - Present

- Kickstarted a portfolio site for the company using React.js, HTML, CSS
- Maintained the company's festival application using React.js, Node.js, Express.js, and PostgreSQL
- Discovered, reported, and fixed two security vulnerabilities in the payment workflow of the festival web application

Extra-Curriculars

University of Toronto Capture the Flag (UofTCTF)

Toronto, ON

Capture the Flag (CTF) Player

- Participated in CTF competitions
- Solved challenges using Python, C/C++, and Bash
- Reverse engineered binaries using Ghidra, angr, and z3
- Exploited binaries using GDB and x64dbg, and pwntools
- Achieved 3rd place in Toronto Region for the CyberSci Regional Qualifiers 2022-23
- Achieved 3rd place in the global standings for picoCTF 2022
- Achieved 2nd place among undergraduate teams for picoCTF 2023

Secretary of UofTCTF

October 2022 - Present

- Maintained a list of all club members
- Taught new members how to use tools and resources to solve CTF challenges
- Organized and hosted CTF practice sessions

EDUCATION

University of Toronto

Toronto, ON

 $HBSc\ Life\ Sciences,\ Major\ in\ Neuroscience,\ Minor\ in\ Computer\ Science$

September 2020 - April 2024

Azure Fundamentals

Microsoft September 2022

Security, Compliance, and Identity Fundamentals

Microsoft November 2022