SHAYON BANERJEE

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Employment

IBM – Security Intelligence Ottawa, Canada
Software Developer Jan 2018 to Apr 2018

- Developed solutions for event collection and processing on IBM's SIEM product, QRadar.
- Fixed critical IPv6 and data-forwarding encryption defects shipped to over 4,000 clients.
- Resolved 17 backend and client-side defects – expected number was 8 – a 212% delivery.
- Worked on new and legacy Qradar platforms using Java, JSP, JavaScript, SQL, and Python.

CAE - Cloud Enabled Services Team Montreal, Canada
Full-Stack Developer May 2017 to Aug 2017

- Developed tools and web apps for data analysis on a 100 terabyte flight simulator blob storage.
- Increased product code coverage from 10% to 55% while maintaining TDD principles.
- Worked extensively with C#, Angular2, and the Azure Service Fabric.

MacroTech Steureungstechnik GmbH Freiburg, Germany
Programming Assistant and Web Developer May 2016 to Aug 2016

- Tested and refactored in-house interface modules for a high vacuum process controller using C++.
- Rebuilt the architecture of the company website by applying HTML, CSS, JavaScript, and PHP.

Skills

Languages: C, C++, C#, Java, Python, JavaScript, TypeScript, HTML, SQL, Bash, R, and Scheme.
Other tools: Node.js, Angular2, OpenCV, Pandas, TensorFlow, Android, CSS, jQuery, Git, Unix/Linux.
Interests: Executive member at Waterloo Networking Association, Project Euler, Hackerrank, Leetcode.

Notable Projects

IslandConquer (C#, Unity, uNet)

- Developed the mechanics, physics, collision detection, and networking for a 3D multiplayer FPS game.
- Incorporated smart AI bots with randomized spawning, movement, and ability to engage players.

MusicInstructor (Java, Android)

- Application listens to a user playing a song in real-time and provides feedback based on performance.
- Uses the BPM of a song and a collection of expected frequencies to determine if the correct note is played.

MyChauffeur (Python, TFLearn, AlexNet)

- A self-driving convolutional neural network that classifies frames to a certain direction of movement.
- Model trained on 2 hours of gameplay, on an online car simulator, resulting in 84% accuracy.

LawYourUp (Python, Flask, HTML, CSS, JavaScript)

- Collaborated with a lawyer to create an application that mitigates the hassle of finding legal precedent.
- Trained a model on 300,000 court cases using the Doc2Vec algorithm to match similar cases instantly.

Education

University of Waterloo
Bachelor of Computer Science 2020
Courses: Algorithms, Data Structures, OS, Compilers, OOP, Combinatorics, Mathematical Statistics.