Rohan Ahmad

Software Developer

Personal Info

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Date of birth
1985-01-07

WWW
rohanoahmad.me

GitHub
github.com/rohbot

LinkedIn
linkedin.com/in/rohanoahmad

Citizenship
Australian

Skills

Python Development

(Flask, PyTorch, PyGame, pandas)

Embedded Hardware Prototyping

(Arduino / Raspberry Pi)

IoT (Internet of Things)

(MQTT, HTTP, Node-RED, Home Assistant)

C/C++

Databases

(MySQL, Redis, MongoDB)

Linux Skills

(SSH system admin, scripting, cron)

Cloud Computing

AWS (EC2, S3, Route 53)

Machine Learning

(PyTorch, sklearn)

Innovative software developer with 5+ years crafting code to deliver products with large business value. Developed several Energy Playground products for Biji-biji Initiative that increased sales revenue by 45%. A highly motivated, team player with a passion for learning new technologies. Has developed systems for web, embedded hardware and cloud platforms in a variety of languages including Python, C/C++, Java, JavaScript and SQL.

Experience

2018-11 - present

Freelance Software Developer

- Interactive Haunted House Escape Room that utilised motion sensors, timers and buttons to trigger various light and sound effects and mechanical devices. Implemented using Arduino MEGA and Raspiberry Pi with Node-RED and custom firmware
- Composed app to control DIY smart lamp, using NodeMCU (ESP8266), Raspberry Pi and Node.js
- Created Live Dashboard to display results of Machine Learning experiments (Python / Node.js)

2016-03 - 2018-11

Electronics and Software Engineer

Biji-biji Initiative, Kuala Lumpur, Malaysia

- Joined as part of four month Volunteer for International Professional Fellowship run my Malaysian Ministry of Finance to kick start their Green Accelerator programme to develop small-scale energy generation solutions for rural communities without access to electricity
- Spearheaded development on Energy Playground Team to create an integrated system of human-powered generators that lead to a 45% increase in sales revenue
- Developed a Bicycle Powered TV that was showcased at Kuala Lumpur Eco Film Festival 2018
- Supervising and mentoring numerous interns to help out on projects and build their skillsets
- Worked closely with Design, Fabrication and Sales Teams to see products through from proposal to delivery

2014-01 - 2015-04

Web Developer

Australian Energy Savings, Brisbane

- Developing in-house system for lead generation and sales tracking
- PHP, Python, MySQL, Javascript

2009-06 - 2011-07

Computer Programmer/Analyst

Toll Fast, Melbourne

- Maintain current Flex based Website and in-house applications
- Design and develop new Java Spring based back-end to replace legacy system
- Perform updates and maintenance on MySQL database
- Install, configure and maintain cloud-based ActiveMQ message infrastructure
- Various system administration tasks on Linux/Solaris servers, included shell scripts

2009-02 - 2009-05

Research Internship

Pohang Institute of Intelligent Robotics, South Korea

- Develop a computer simulator for an autonomous flying quad rotor helicopter
- Research and develop a model for rotor dynamics
- Write code within the existing C++ simulation Framework

2005-07 - 2006-07

Automation Cadet

Patrick Stevedores Automated Terminal, Brisbane

- Provide support for the Automated (Robotic) Container Terminal
- Assist in the expansion of the terminal
- Software Development in Python and C++
- Desktop/Network Support
- Exposure to PLCs
- Documented Support Procedures

Education

2003 - 2008

Swinburne University of Technology, Bachelor of Engineering (Robotics and Mechatronics)/ Bachelor of Science (Computer Science and Software Engineering)

- Achieved Upper Second Class Honours
- Underwent exchange program to Sarawak, Malaysia for 2nd Semester 2004
- Developed autonomous quad-rotor drone that was capable of maintaining level flight with the assistance of ultrasonic sensors and an Arduino

Courses

2018-11 - 2019-03

Udacity, Deep Reinforcement Learning Nanodegree

- Implemented Deep Q Learning, Actor Critic and Proximal Policy Optimization algorithms in Python with PyTorch to solve Unity ML-Agents environments
- Training agents in the cloud using AWS EC2 GPU instances