Jayant **Tiwari**

OVERVIEW

- Aspiring Full-stack Developer, Al Specialist and Computer Vision Expert
- Strong foresight in understanding problem-space of a given product
- Proven ability to understand and excel at new technologies

EXPERIENCE

Canon Innovation Lab, Kitchener — Rapid Prototype Developer Jan 2017 – May 2017

Primary role is to develop innovative post-capture experience of Canon products

- Developed tool to recommend points-of-interest based on user's photos
 - o Achieved designation of Inventor on Patent (pending)
 - Developed supervised learning model using K-cross validation over 300,000 POIs
 - o Tool built using words2vector, Django and PostgreSQL
- Developed social app using React-Native and Node Backend with Socket.IO &
 - Improved video rendering time by 30% using Lambda function on AWS
 - o Developed black-box scripts to cut development and testing time by %500
 - o Improved robustness by generating failed sessions using PostgreSQL and JWT
 - o Improved scalability by migrating application to AWS's Elastic Computing instance

SAP Emerging Tech, Toronto — Software Applications Developer

May 2016 - September 2016

- Primarily developed innovative solutions to SAP Cloud technologies
- Developed Full-Stack Application to visualize & correlate retail data with Census data
 - Performed data-mining to create and aggregate census data with geo-data
 - o Cut query time by 30% using stored-procedure on in-memory DB using SAP-SQL
 - o Implemented pattern matching to determine possible new store locations
 - o Created visualization and trend analysis using d3.js
- Initiated smart-garden project to highlight prospects of IoT technologies with SAP HANA
 - o Created modular embedded software design to retrieve sensor values and controls
 - Prototyped dashboard to display real-time sensor readings

SpringBoard, Mississauga — iOS Developer

September 2015 – December 2015

- Developed .NET desktop-app prototype in C# to secure \$30,000 in business
- Designed database schema in **SQLite** and create **ORM** using Entity framework in C#
- Parsed and reported financial PDF files using regex and ASP.NET

PROJECTS

Microsoft Hackathon 2016: CHEAT-CHAT-BOT &

- Achieved 2nd place overall for Microsoft Hackathon 2016
- Chat-bot which assists in developers with common syntax while avoiding stack-overflow
- Developed using Azure with Microsoft Bot Framework

Microsoft Hackathon 2017: Holo-Analytics ℰ

- Achieved 2nd place overall for Microsoft Hackathon 2017
- Hololense app in visualizes retail store foot-traffic to aid in product placement
- Generated Heat-map, K-means clusters to identify high and low traffic area

Compiler: VHDL to waveform *⊗*

- Wrote a compiler in Java for subset of VHDL to be translated into waveform
- Project encompassed code generation, register allocation, dead code elimination



SKILLS

Programming:

C#	
Java	\bullet \bullet \bullet \circ
Python	• • • • •
Node	\bullet \bullet \bullet \circ
HTML/CSS3	• • • • •
C/C++	• • • • •

Technologies:

MOBILE/WEB	BACKEND	DB	OTHERS
Android SDK	Django	MySQL	AWS
React-native	ExpressJS	PostGres	Azure
OpenUI5	Web2py	SAPHANA	SCIKIT
JQuery	ASP.NET	SQLite	OpenCV
	Socket.io		Spark
			NGINX
			Docker

ACTIVITIES

UW-Aerial Robotics

Contributed to development of mesh network using dynamic port-forwarding with XBee

AWARDS

2nd place Microsoft Hackathon 2017 2nd place Microsoft Hackathon 2016

EDUCATION

Machine Learning (Udemy)

Operating Systems

Compilers

Algorithms and Data Structures

Embedded Systems

B.ASc Computer Engineering (2019)