PERSONAL INFORMATION

Victor Vadakechirayath George

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Skype victorvvg17

Sex Male | Date of birth 8 March 1993 | Nationality India

WORK EXPERIENCE

May 2019 - Present

Student Assistant, Firmware development

PSIORI GmbH.

Merzhauser St 144, D – 79100 Freiburg.

- Firmware development for camera in C++ for Computer Vision project.
- Development of auto exposure functionality for camera using RPROP algorithm.
- Languages and software used: C++, python, Qt, VS Code.

Business or sector Data Science and Computer Vision.

Feb 2019 – Jan 2020

Student Assistant, Android development

Department of Sport and Sport Science, University of Freiburg.

Schwarzwald St 144, D – 79117 Freiburg.

- Further development of Android application for tracking exercise routine of patients under rehab.
- Bug fixing and testing of the application.
- Languages and software used: Android Studio, Android (Java).

Aug 2017 – Jul 2018

Embedded Software Developer

Tagbox Solutions Pvt. Ltd.

Indiranagar 3504/A, D – 56003 Bangalore, India

- Firmware development for interfacing peripheral sensors like accelerometer and temperature sensor to Bluetooth controller.
- Communication protocols used were SPI, I2C, UART and 1-Wire Communication.
- Controller used was 32-bit ARM Cortex-M4 nRF52840 Bluetooth low energy chip.
- Calibration of temperature sensors using Linear Regression methods.
- Sensor data monitoring and visualisation using R and psql fundamentals.
- Languages and tools used: Embedded C, Keil IDE, eclipse IDE, Segger Embedded Studio.

Business or sector IoT and Cold chain.

Jul 2015 – Jul 2017

Software Engineer, Automotive Software Development

Robert Bosch Engineering and Business Solutions.

123 Hosur Rd. D – 560095 Bangalore, India

- V-Model Software development and testing of Power train modules in Diesel variant.
- Automation of quality checks using Perl scripting.
- Worked with TriCore controller from Infineon using Embedded C.

EDUCATION AND TRAINING

Oct 2018 - Present

MSc. Embedded Systems Engineering, majoring in Informatics.

University of Freiburg, Germany.

- Algorithms and Data-structures.
- Modelling and System Identification, Numerical Optimisation, Mobile Robotics and Numerical Optimal Control.
- Machine Learning, Statistical Pattern Recognition, Deep Learning, Reinforcement Learning, Image Processing and Computer Vision.

Aug 2011 – April 2015

Bachelor of technology (B.Tech) in Electrical and Electronics Engineering.

College of Engineering Trivandrum, Kerala India.

- Thesis: Wireless charging system for Electric vehicle using electromagnetic induction.
- Power Electronics, Control Systems, Digital Signal Processing, 8085 microprocessor lab.

PERSONAL SKILLS

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
German	B1	B1	B1	B1	B1

Programming skills

- Languages:
  - C, C++, Python: Advanced
  - MATLAB, psql: Intermediate
  - HTML, CSS, Java: Beginner
- Deep learning frameworks: PyTorch, TensorFlow
- IDEs: Jupyter Lab, VS Code, Android Studio
- Version control: Git

ADDITIONAL INFORMATION

Projects

- **Cartpole balancing using Reinforcement learning**
  Classical RL control task involved balancing of a vertical cartpole upright with swing and horizontal cart movement.
  Algorithm used: DDPG with PyTorch framework.
  GitHub: https://github.com/victorvg17/rl-uni-project

- **Lunar Lander with Deep learning**
  Design landing strategy for lunar lander using Imitation learning in OpenAI gym environment. The network was trained using image data of the landing surface, state vectors and corresponding rewards in PyTorch framework.
  GitHub: https://github.com/victorvg17/lunar-lander

- **Security logbook application**
  Worked on building a guest entry logbook Android application keeping track of number of visitors, visitor entry details and total visitor stats for the day.
  GitHub: https://github.com/victorvg17/Security-log-book