SATTANAATHAN THAYUMANAN

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OBJECTIVE

Graduate Computer Engineering student with two years of experience as Software Designer seeking a full-time opportunity in the field of CPU/GPU/SoC/Reconfigurable Computers/ASIC, Computer systems, Software Systems Development and Autonomous systems.

EDUCATION

Master of Science, Electrical and Computer Engineering — Dec 2019 (Expected)
University of Florida, Gainesville, FL — GPA 3.66/4.00
Relevant Coursework: Principles of Computer Systems Design | Reconfigurable Computing | Computer Architecture | Advanced System Programing | Virtual Computers | Automotive Safety and Security | Distributed Operating Systems | Image Processing and Computer Vision

Bachelor of Technology, Electrical and Electronics Engineering — May 2016
National Institute of Technology, Trichy (NIT Trichy), India — GPA 7.20/10.00

PROFESSIONAL EXPERIENCE

Safety System Engineering Intern — May 2019 – Aug 2019
Qualcomm, San Diego, CA

- As a Safety System Engineering Intern, worked with a team of Engineers and Managers to implement the Tool Qualification process for the Qualcomm tools and products per ISO26262, the international standard for functional safety of electrical and/or electronic systems.
- Analyzed the gap between the international standard and the existing functional safety compliance in the Qualcomm tools and provided a methodology to bridge this gap. Designed a tool qualification kit per ISO26262 for Qualcomm tools.

Graduate Research Assistant — Oct 2018 – Present
ECE department, University of Florida, FL

- Working with Professor Dr. Sandip Ray on hardware-software co-validation research targeting firmware validations using formal verification methods.
- Developed and implemented a machine learning based detection and mitigation system to introduce robustness in the Co-operative Adaptive Cruise Control in autonomous vehicle research.

Software Designer — July 2016 – July 2018
Alstom Transport, Bangalore, India

- Collaborated with designers in developing embedded systems software for ERTMS by applying key principles of computer engineering and embedded systems at ALSTOM Belgium.
- Delivered software solutions consistent with the product roadmap and released plan milestones.
- Key learning: Software Architecture | Software development and verification process | Storage Area Network

Train Control Validation Intern — May 2015 – July 2015
Alstom Transport, Bangalore, India

- Designed and developed a simulation of Low Voltage Control Logics, implementing the train control system design.
- Key learning: ControlBuild | NI LabVIEW | NI PXI cards | Train control

RESEARCH EXPERIENCE

ROBOTIC ARM EQUIPPED SOLAR POWERED HYBRID ELECTRIC WHEELCHAIR — Aug. 2014 – Mar. 2015
TEXAS INSTRUMENTS INNOVATION CHALLENGE INDIA DESIGN CONTEST 2015

- Designed, developed and fabricated an embedded system and power controller for dual robotic arm equipped wheelchair
- Semifinalists | Top 86 teams out of 1209 | TIIC IDC – 2015

SMART WATCH — Jan. 2014 – Mar. 2014
SANGAM – PRAGYAN 2014

- Designed, fabricated and developed a Smart Watch with Android UI with MSP430 microcontroller under the budget of $30.
- 2nd runner up in circuital category at SANGAM – PRAGYAN 2014.

SKILLS

Programming Languages: JAVA | C# | VHDL | Python | Lua | C/C++ | Embedded C | MATLAB | HTML | XML | ASM | Elixir
Simulation/Design tools: JasperGold | Android Studio | Vivado | Modelsim | Visual Studio | Eclipse | Delphi | VMware | KVM

LEADERSHIP AND INVOLVEMENT

Cofounder and Lead Volunteer – HumaNITTy, Trichy, India — Sep. 2014 – July 2018
Twin national level award winning philanthropy movement. As a lead volunteer, guided fellow students in events of Joy of Giving.