

## PERSONAL INFORMATION Tsvetomir Asenov



Sofia, Bulgaria

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## WORK EXPERIENCE

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03/2019–Present

### Hardware Design Engineer

#### ConverterTec Bulgaria

*Working as Hardware Engineer at ConverterTec Bulgaria (former Woodward Bulgaria, RPS), my activities include:*

- Hardware design of microprocessor systems including- FPGAs; DSPs;XC167 uP, etc;
- Schematic Design (Schematic Creation, Sch Simulations, Component creation);
- PCB Design (Layout Design, CES, Pre&Post Layout Simulation);
- Product documentation preparation; Release to serial production;
- Physical system test and verification (troubleshooting);
- ECAD Library Maintenance;

#### Woodward Bulgaria

- Designing of electronics for Engine System and Renewable Power Systems divisions;
- Designing of speed controllers, prototypes for wind turbine converters;
- PCBAs testing & troubleshooting;
- Translation of PCBs according to RoHS directive;
- Packaging; Preparing product documentation needed for releasing to a serial; production. Part creation;
- DFMEA;

11/2016–12/2017

### Developer of microcontrollers-intern

#### RIS Elektro, Sofia

- Development and testing of controllers;
- PCB design;
- Testing, troubleshooting, micro controller programming, installing it into the field.

06/2013–09/2013

### Electrician- internship

#### GIPS, Vidin (Bulgaria)

- Maintenance and repairing of electrical machines (electrical motors, power transformers), cable lines, power lines 20 KV.

01/2011–08/2011

### Electrician

#### VIPOM, Vidin (Bulgaria)

- Maintenance and repairing of electrical machines and devices such as: electrical motors, metal cutting machines, bridge cranes, industrial lighting;

## EDUCATION AND TRAINING

- 01/2022–04/2022 Advanced PCB Layout Course at FEDEVEL Academy, US
- 07/2017–Present PHD Student “ Electrical Power Engineering “  
**Technical University of Sofia**  
Thesis: Smart load management of micro and nano grids.  
Current activities:
  - Dump load controller development based on Atmega 328Pi microcontroller;
  - Software implementation and PCB design;
  - Smart grid simulation and verification – Matlab Simulink;
- 10/2015–02/2017 Master's degree, Electrical Engineering, Power System Automation  
**Technical University of Sofia**  
Diploma work – “Smart controlling of loads in micro and nanogrid”
- 09/2011–05/2015 Bachelor's degree, Electrical engineering  
**Technical University of Sofia**
- 09/2005–06/2010 Electrical equipment  
**PATHS "Vasil Levski", Vidin**

## PERSONAL SKILLS

Mother tongue(s) Bulgarian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2
Certificate for completed an English Language Course at CEFR B1					
Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user					
<u>Common European Framework of Reference for Languages</u>					

### Personal skills

Team oriented person who can easily adapt to a new environment;  
 Self-driven team player focused on the details.  
 Ability to handle pressure and meet deadlines.

Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

### Digital competences - Self-assessment grid

Expedition PCB, Mentor DxDesigner, Mentor Hyperlynx, AutoCAD, Matlab, Arduino(I/O controller), Altium Designer, LTSpice;

ERP systems (WISE, Windchill; Dynamics 365 BC Central) Microsoft Office (Word, Excel, PowerPoint);

## ADDITIONAL INFORMATION

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### Publications

- R. Stanev, K. Viglov, K. Nakov, Ts. Asenov, A real time power hardware in the loop test bed for power system stability studies. Bulgaria, Varna, St.St. Constantine and Elena“, September 9 - 12, 2020;
- Experimental Digital Protection Device for Training Purposes , Protection, automation & control world conference, Sofia, Bulgaria, June 28;
- A Physical Model for Micro-, Mini-and Nanogrid Research and Testing-2018 IX National Conference with International Participation (ELECTRONICA);
- Mathematical modelling of micro and nanogrids with distributed generation, 2018 Seventh Balkan Conference on Lighting (BalkanLight);
- Micro and nanogrid active power management in stand alone and grid connected operation, XXVI International Scientific Conference Electronics, 13-15 September 2017;
- "Physical model of hydro generator for investigation of power system stability and transient processes ", VII Scientific Conference Faculty of Electrical Engineering 2015, Sozopol;

**Honours and awards**    Award for excellent performance during my education at Technical University of Sofia