Ivan Zakoretskyi

Address: 20 Yeuropeyska str., Poltava, 36011, Ukraine	Phone.: +38 (095) 92 98 790
Date of birth: April 10, 1976	E-mail: ivnzak@gmail.com
Marital status: Married (children 7 and 13 years old)	Web: https://ivnzak.xyz
Experience: 15 years in Industrial Automation	Skype: ivanzakoretsky

Objective:
I am looking for Industrial Automation PLC/HMI/SCADA Engineer Programmer position with a focus on organization, business & technical architect, where I can apply my knowledge and experience
to carry out tasks with efficiency, professionalism and cost effectiveness.

Education:
Bachelor of Analytical Chemistry and Computer Science (August 1995 – May 1999)
Poltava V. G. Korolenko NP University, Analytical chemistry and Informatics.

Qualifications:
Industry 4.0 Technologies: IIoT Edge (NUFT, Kiev — 2021)
PLC OOP: Master Program Infrastructure Design (Udemy Inc —2020)
Project Management: Hard Skills Course (IAMPM, Odessa — 2019)
Course of Java Automation QA Engineer (Hillel, Odessa — 2018)
Course of Computer Science CS50 (MIT/HarvardUniversity, edX — 2017)
Course of QC/QA Engineer (Testing School, Lviv — 2016)
System Architecture Siemens Simatic in TIA Portal (Education Centre of Siemens, Lviv — 2016)
Product management. Scrum of scrums (PMSchool, Kharkiv — 2015)
LONIX Building Management Systems (Headquarter, Helsinki — 2013)

Work experience:
Blumenbecker Gruppe Ukraine LLC (Kiev, 06.2021 — present)
Industrial Automation Software Engineer (Contract)
- - Software development for PLC and HMI based on Siemens SIMATIC Step7 and TIA Portal architecture;
- - Deployment of server and client software TIA Portal in the enterprise cloud;
- - Customer technical support (Ukraine).

VLB-Montazh LLC (Kiev, 11.2019 — 10.2021)
Industrial Software Engineer / Head of Industrial Automation Department
- Development and implementation of architecture of technical solutions;
- Implementation of new and modernization of existing automation systems for domestic and foreign enterprises;
- Software development for PLC / HMI / SCADA based on Step7, WinCC, TIA Portal, PCS7;
- Customer technical support (Ukraine, Armenia, Poland, Germany).

AB-Soft LLC (Odessa, 10.2016 — 10.2019)
Technical Project Manager (Contract)
- Management of several (3) teams (up to 32 engineers) in the field of commercial web development;
- Using Agile and Kanban methodologies to manage projects and teams;
- Customer technical support (Ukraine, Russia, USA, China).

Astarta-Kyiv LLC (Kiev, 04.2014 — 10.2016)
Implementation and Commissioning Engineer / Technical Project Manager
- Development and management of holding Process Control and Information Technologies projects,
  based on the hardware and software of Siemens and Vipa (Step7, WinCC, PCS7),
  and Festo, Phoenix Contact, Sick, ABB, Schneider, Mitsubishi equipment;
- Created from scratch enterprise laboratory information management system (LIMS) for MES platform;
- Technical support of holding companies.

[Safety Technologies LLC](#) (Poltava, 07.2013 — 03.2014)
Leading Engineer for Industrial Safety Software Development
- Developed and implemented more than 11 industrial safety projects for technological and mining enterprises of Ukraine with the transfer data to the Ministry of Emergencies and responsible persons;
- Software development for PLC, Vipa (Step7);
- Software development of SCADA-systems (WinCC for PC, and Movicon, Zenon for panels);
- Development of schemes and documentation (EPLAN-Rittal, AutoCAD).

[Smart System Group - East LLC](#) (Kiev, 06.2011 — 06.2013)
Software Developer / Technical Project Manager
- Development and management of smart home automation projects, management systems for engineering networks of buildings and structures (BMS), light management, power supply and dispatching;
- Development of software and life support system based on Central AMX PLC (USA), Field LONIX PLC (Finland), SCADA WinCC (Germany).

[UkraineServiseAutomation Private Firm](#) (Poltava, 06.2006 — 06.2011)
Design Engineer / Technical Project Manager
- Software development for PLC (S5/S7) and SCADA (WinCC);
- Development of schemes and documentation (EPLAN / Compass);
- Creation of Terms of References, Software Requirements Specifications, negotiation with Customers;
- Signing of Acts of performed works;
- Warranty and post-warranty technical support of Customers (Ukraine, Russia, Serbia, Canada).

[PetroHolding LLC](#) (Poltava, 05.2003 — 06.2006)
Price Calculation Engineer
- Preparation and administration of construction documents according to internal standards for
- Construction work in heavy hydrogeological conditions with the change of the landscape;
- Control and protection of completed works for Gas&Oil Industrial Headquarter of Ukraine.

Technical Skills and Background:
- Programming according to EN/IEC 611-31-3 (LAD, FBD, STL, CFC, SCL) in TIA Portal, Step7, PCS7;
- Development of HMI/SCADA systems on WinCC, Zenon, Movicon;
- Base knowledge of Schneider (PL7 PRO), Mitsubishi (PX/GX Developer), Allan Bradley (RSLogix 5000);
- Solution support for General Control and Automation Systems / Frameworks: PCS7, ProLeiT, InTouch;
- Data layer preparation with SQL/noSQL Data Base Engines to Enterprise level (like ERP, MES, LIMS);
- Development (EPLAN/AutoCAD, Visio and SolidWorks), and assembly of control cabinets;
- Installation and configuration of Profibus, Profinet, Modbus, ASI, Ethernet/IP networks;
- Creation of technical documentation and control of works by the Customer and the Contractor sides;
- Administration of Windows Operating Systems (includes Server), and Unix;
- Projects Management (Waterfall, Agile Scrum/Kanban);
- Driving License (Category B);
- English — Intermediate+ (B2/C1);
- German — Beginner;
- Computer Literacy: Microsoft Office (includes Visio), EPLAN, SolidWorks, AutoCAD, Jira.

Additional information:
Ready for business travels (up to 30% of working schedule) and relocation.

SHORT DESCRIPTION OF SEVERAL PROJECTS

1. Building automation based on Smart Home technology (Dispatching, Control and Life Support System)

Purpose of the system: continuous monitoring and control of energy, lighting and HVAC systems with elements of autonomous power supply. **Hardware and software:** PLC: AMX, Lonix, Echelon; **Workstations:** Panel PC, Stationary PC, TV, iPad. iPhone, iPod, **HMI:** WinCC, COBA, TPDesign, Client-Server. **Interfaces/Protocols:** Ethernet, LON, RS234/485.

2. Complex automation of the blueberry processing line
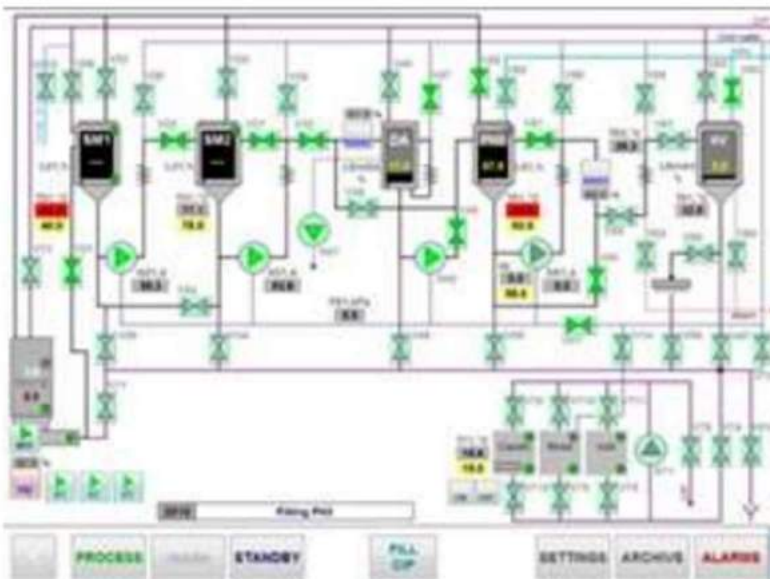
Purpose of the line: getting the finished product (blueberry paste) from frozen and fresh raw materials (berries) by hot filling in a glass bottle packaging, and CIP. **Hardware and software:** PLC: Vipa Speed 7 300 Series, SIMATIC Step7; **Workstations:** SIMATIC Panel PC, WinCC; **Interface:** Ethernet.

3. Comprehensive automation of the line for the pasteurization of milk
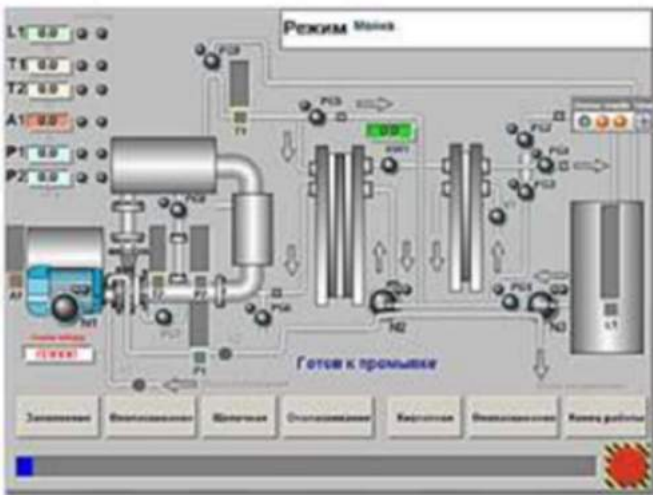
Goals of the line: getting the finished product (paste or pasteurized milk) from prepared and fresh raw materials (milk) by hot cavitation method with the next packaging in plastic containers, and CIP. **Hardware and software:** PLC: Vipa Speed 7, SIMATIC Step7 300 Series; **Workstations:** SIMATIC Panel PC, Zenon; **Interface:** Ethernet, MPI PtP.

## 4. Single and double circuit sections of beet grinding and sugar juice preparation

Purpose of the line: the grinding and mixing system of raw materials (sugar beet) with the addition of chemical ingredients to produce products with accurate parameters of sugar content, dry matter (CV) and pH. **Hardware and software:** PLC: Siemens 315-2DP, SIMATIC Step7; **Workstations:** PC, WinCC, Client-Server; **Interfaces:** Ethernet, Profibus.

5. Automatic dual-circuit drying system for raw materials

Purpose of the line: production of finished raw materials (dried pulp) by maintaining the temperature regime of gas burners and vacuuming due to cyclones. **Hardware and software:** PLC: Siemens 300 Series, SIMATIC Step7; **Workstations:** PC, WinCC, Client-Server; **Interfaces:** Ethernet, Profibus.

6. Automatic line for the preparation and granulation of sunflower husk
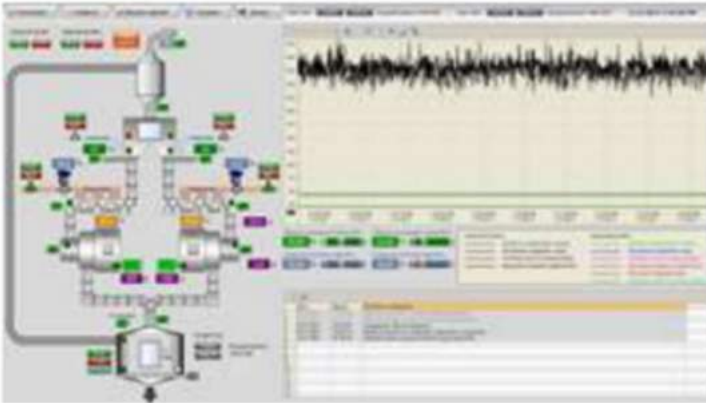
Purpose of the line: the raw material is prepared by the method of drying and vacuuming and obtaining finished products by granulating while maintaining the volume, supplying raw materials and controlling the output moisture. **Hardware and software:** PLC: Siemens PLC 300 Series, SIMATIC Step7; **Workstation:** PC, WinCC; **Interface:** Ethernet.

7. Automation complex for milk acceptance and storing stations and data transfer to MES

Four contour, scalable vacuum milk intake.
Purpose of the line: milk reception for production, flow control, temperature and bacteriological parameters, data transfer to MES, and CIP. **Hardware and software:** PLC: Vipa Speed 7, SIMATIC Step7; **Workstation:** PC, WinCC; **Interfaces:** Ethernet, Profibus, **Dbase:** MSSQL.

8. Automatic complex of vacuuming of dry suspension from milk whey
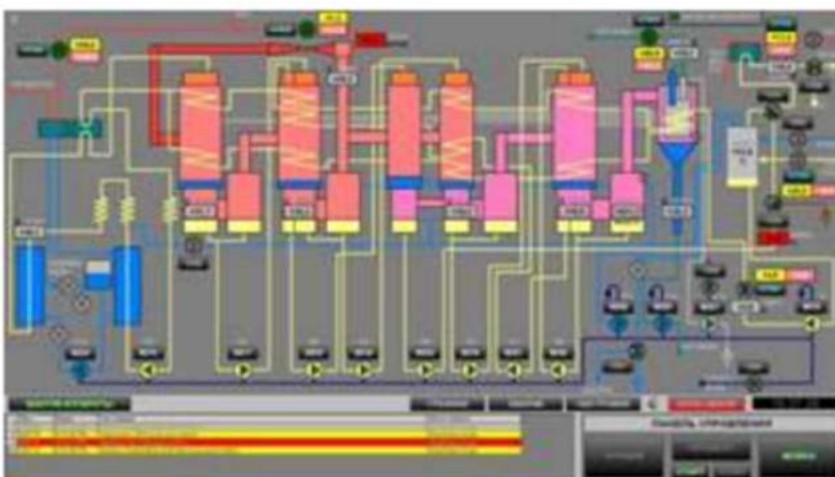
Purpose of the line: obtaining products with the required parameters of dry substances and moisture for packing in bags or on food production lines, and CIP. **Hardware and software:** PLC: Siemens 300 Series, SIMATIC Step7; **Workstation:** PC, WinCC; **Interface:** Ethernet.

## 9. Complex automation of fifth contour station of sugar juice evaporation with FuzzyLogic

Purpose of the line: obtaining sugar syrup from juice for further production by supporting temperature, pressure, and pRessure/vacuum with elements of energy conservation. **Hardware and software:** PLC: Vipa Speed 7, SIMATIC Step7; **Workstations:** PC, WinCC, Client-Server; **Interfaces:** Ethernet, Profibus.

10. Centrifuge battery control system with support for mass-energy recovery (1,5MWth, efficient ~46%)
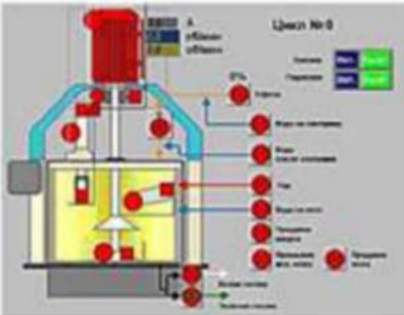
Purpose of the line: obtaining ready-made / pre-finished / raw materials from condensed sugar syrup by filtering from molasses and centrifuging, steaming, drying. **Hardware and software:** PLC: Siemens 300/200 Series, SIMATIC Step7; **Workstations:** SIMATIC Panel PC, PC, WinCC; **Interfaces:** Ethernet, Profibus.

11. Turnkey automation of three sections of a sugar factory and integration with neighboring tech areas
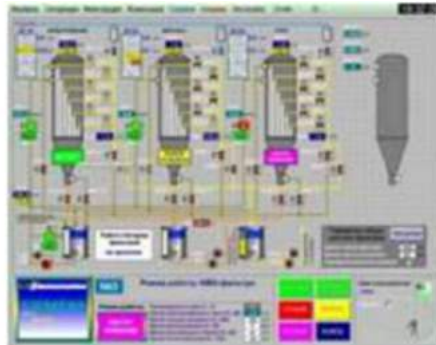
Purpose of the sections: getting pure sugar syrup from the juice by cleaning by saturation, filtration and thickening for further use in obtaining sugar. **Hardware and software:** PLC: Vipa Speed 7/Siemens 300 Series, SIMATIC Step7; **Workstations:** SIMATIC Panel PC, PC, WinCC, Client-Server; **Interfaces:** Ethernet, Profibus

12. Automated biodiesel cooking control line

Purpose of the line: production of bio-diesel fuel (methyl ether) from vegetable raw materials by adding chemical components, thermal control and technological phase separation. **Hardware and software:** PLC: Siemens 200 Series, SIMATIC Step7; **Workstation:** PC, WinCC; **Interface:** Ethernet.

13. Cooking management system (kitchen), preparation and packaging of chocolate bars

Full-automated line from the preparation of raw materials to packaging of confectionery products.
Purpose of the line: obtaining final products (chocolate bars) by weight, volume, time, speed dosing and mixing with temperature control, crushing, wrapping in packaging foil, and packing in boxes. **Hardware and software:** 22 Servo Drives, PLC: Vipa Speed 7 317, SIMATIC Step7; **Workstation:** Panel PC, WinCC; **Interfaces:** Ethernet, Profibus.

15. Automation of grain elevators and kombi-feed preparation

Automated complex for receiving grain from vehicles to the elevator and feed preparation.
Purpose of the object: long-term storage of grain, aeration, moving along the routes between the tanks, feeding to the feed mill and preparing kombi-feeds with food additives for livestock farms. **Hardware and software:** PLC: Vipa Speed 7, SIMATIC Step7; **Workstation:** PC, WinCC; **Interfaces:** Ethernet, Profibus.

16. Industrial safety systems of chemical, gas, oil enterprises

Automatic monitoring and warning systems for industrial accidents with voice alarm and notification.
Purpose of the system: control of technological parameters (pressure, gas contamination, levels, acidity, vibrations, e.t.c.) and formation of message rankings (sound or voice messages) from warning to evacuation, transmission data to the fire service, rescue service, emergency, and to other responsible government services. **Hardware and software:** PLC: Vipa Speed 7 300/200/1200 Series, SIMATIC Step7; **Workstations:** SIMATIC Panel PC, PC, WinCC; **Interfaces:** Ethernet, Profibus.

17. Automatic Dual-Circuit Pharmaceutical Sterilization System
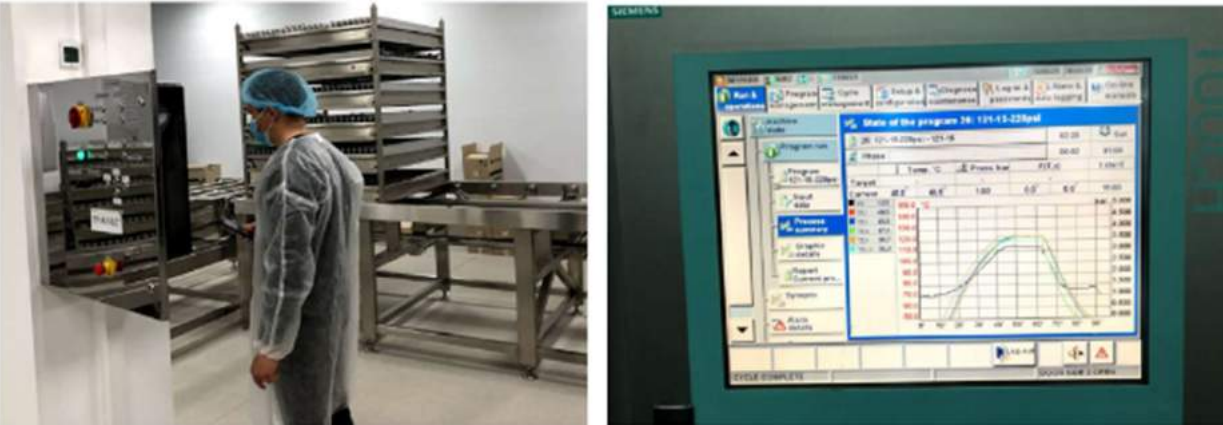
Purpose of the system: control of technical parameters, acceptance of plastic containers filled with the drugs/solutes, sterilization and unloading of lines for packaging. **Hardware and software:** 8 Linear Servo Drives, PLC: Siemens S7 300, SIMATIC Step7; **Workstations:** SIMATIC Panel PC, PC, WinCC; **Interfaces:** Ethernet, Profinet.

18. Palletizer for blanks of cardboard packaging of cardboard and paper mill

Purpose of the object of automation: stacking blanks of cardboard packaging in layers on pallets according to recipes. **Hardware and software:** 12 AC Drives with FQ and Inc-Encoders, PLC: Siemens S7 300, SIMATIC Step7; **Workstation:** SIMATIC Panel PC; **Interfaces:** Ethernet, Profinet.

SUMMARY

Main expertize:

Expertise	Description	Rating
0. Programming for Industrial PLC (SCL)	**Full cycle of Industrial Automation and Process Control implementations, based on the next hardware, software, and equipment:**	■■■■■
1. Programming for PLC (LAD, FBD, STL, CFC)	- Siemens SIMATIC Step7 (up to 5.4); - PCS7 (6.1-9); - TIAPortal (13-17).	■■■■□
2. Development of industrial SCADA systems (WinCC)	**Creating program and graphical interfaces in favor of SCADA / HMI purposes:**	■■■■■
3. Development of SCADA / HMI systems (TIAPortal)	- Zenon, Movicon, WinCC Flexible; - SIMATIC WinCC (6.03-7.4); - TIAPortal.	■■■■□
4. Programming for engineering management systems	**Development of software for BMS (building management systems), and dispatching systems:** Iridium, Crestron, Thermokon, Eschelon, Lonix, Harman, AMX, Cisco.	■■■□□
5. Installation and adjustment of networks, design and assembly of cabinets	**Implementation of data exchanging for interfaces and protocols:** RS232/485, LON, ModBus, MPI, ASI, ProfiBus, Profinet, TCP/IP. **Networks adjustment, cabinets assembling, cable laying, adjustment and connection.**	■■■■□
6. Interaction with Similar and Related Systems	**Base knowledge of:** - Schneider (PL7 PRO); - Mitsubishi (PX/GX Developer); - Allan Bradley (RSLogix 5000); - Node-RED.	■■□□□
7. Solution support for General Control, Management and Automation Systems, and Frameworks	**Adjusting and projects support for:** - ProLeiT; - Wonderware InTouch; - ERP, MES, LIMS. **General knowledge:** - Montelectro; - WinCC OA; - RSView; - CODESYS; - BRAUMAT / SISTAR.	■■□□□
8. Drawings, wiring diagram, 3D modelling	**Create technical documentation such as concept, architecture, business/tech process, electrical circuitry, list of required, hardware, equipment, cables, preparation of visualization, and rendering objects:** EPLAN, AutoCAD, Visio and SolidWorks.	■□□□□