

# Curriculum vitae

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## 1. Personal informations:

- **Mihai Rainer** - birthday 15.12.1972;
- Str. Mircesti, Nr.28, Sect.1, Bucuresti;
- Phone: 0742 385 351;
- <http://www.mihairainer.ro>;
- e-mail: [mihai@mihairainer.ro](mailto:mihai@mihairainer.ro)

## 2. Previous jobs:

- 01.10.2003 - present - **GIGA Electronic International SRL – Technical Dept. Manager.**
  - Research & development – hardware & software;
  - Solutions and installation for the following equipments: PABX, data/voice networks, burglary/fire detection and signaling systems, CCTV systems, PLC automation software development, configuring and managing e-mail servers, routers, VPN, VoIP, software development (automation, T&A), microcontroller based applications - hardware and software (Microchip, RabbitCore).
- 01.08.1998 - 30.09.2003 - AXA Construct SRL - IT/Telecom department manager.
  - Solutions for telecommunications/IT, installation for telecommunication/IT equipment (hotel access control systems, hotel servers), internal use software development. Construction yard experience for 3 years, hotel maintenance.

## 3. Projects (details about my projects at <http://www.mihairainer.ro>):

### a. Automation:

- BMS application - supermarket – BAUMAX Bacau - HMI and software application - TAC Xenta 400;
- automated water system for residential use - PLC software - ARRAY;

### b. Hardware & Software development:

- GSM 4IN/4OUT remote controlled module - schematic, PCB and microcontroller software;
- Systems for vending machines (coffee, snack, games, etc.)
  - MDB, Executive, parallel – MDB interface with relay and display for public massage armchairs applications;
  - proximity card reader with GPRS accounting system and audit communication (photo at [www.mihairainer.ro](http://www.mihairainer.ro) -schematic, PCB and microcontroller software);
  - Payment system protocol converters and interfaces (convertor from and to Pulse/Parallel/Executive/MDB);
  - MDB online (GPRS based) cashless module for vending machines;
  - Token dispenser with MDB bill validator, coin changer and parallel hopper (automatic token sell for playgrounds).
- Data acquisition interfaces (hardware and software) to connect with various systems (T&A systems, control access systems, industrial devices and equipments) data acquisition and store on the database, reports, etc;
- voice/data networks - connect, testing, configure, wired and wireless solutions, VPN;
- RS485 control module software, NuDAM compatible;
- fleet management, GPS/GPRS based system - hardware and microcontroller software;
- T&A systems - software for T&A database management - IMPRO controllers and SYCAPS T&A clock;
- other applications developing and integrating microcontrollers, GSM modems, GPS receivers and PLC;

### c. Networking

- connecting, testing, wired, wireless (medium port number - 200);

- install/configure/maintain - email servers (Linux), routers (Linux), Voip (Linux) - Lemarco, Mobilux, Eurolease Auto, China Shipping Romania Agency, Transatlantic International);

**d. Help desk**

- Help desk for Internet & e-mail users assisting them to solve the problems related to those services;

**e. Security, fire detection, CCTV:**

- fire detection and signaling system (Alpha Rocas, Mobilux, Piata de Gros, Dyo Balkan, IPSO, Palatul copiilor, Comtec International);
- CCTV systems, up to 32 cameras (NOVITAS Chisinau, Lemarco - Sugar factory - Liesti);

**4. Knowledge and experience:**

- PLC programming (BMS application - T.A.C. Xenta controllers and software applications);
- PIC Microchip programming (JAL, MikroC, MikroBasic);
- RCM2300 (RabbitCore) programming (Dynamic C);
- Delphi/FreePascal/Lazarus/Kylix, Visual Basic programming, including database and serial communication, CGI, daemon;
- Databases (MySQL, PostgreSQL, Firebird);
- Linux install and configure (e-mail server, fax server, VoIP, router/VPN), Windows install and configure;
- GPS NMEA 0183 protocol;
- Vending protocols (MDB, Executive, Parallel, Pulse);
- SMS/GPRS using AT commands on GSM modems with internal TCP stack, for remote control and automation;
- OrCAD Capture, Layout;
- Burglary systems install/configure (Paradox);
- Fire systems install/configure (Bentel, Kentec);
- PABX install/configure (Data Comm, Panasonic);

**5. Other information:**

- direct customers and suppliers relationship, bidding, help desk, acquisition;
- project management, construction yard experience, team coordination experience;
- driving license (B) since 1992, no penalties;
- military duty - complete;