Skills and Knowledge in Electronics

- Certificate of professional qualification in electrical engineering of <u>Decree No 50/1978</u> of the Czech Office for Occupational Safety and the Czech Mining Authority, Section 4
- > small PCB design and realization also using Electronics CAD
- > reading schematics & device datasheets; worked with JTAG and older CPU emulator probes
- > use of lab instrumentation such as oscilloscope, wave generator, logic analyzer, digital/analog multimeter
- support and repairing of Matrox graphics boards
- designed and prototyped analog and digital cables like RS232, RS485; ad hoc I/O cable to connect intelligent GSM, Z80, RCM3700 and LP3500, SBCs, Raspberry PI, ESP32, CAN transceiver, GPS; graphic boards' cables and switches
- > maintenance of AT, VESA, MCA, PCI and other expansion boards for PC
- 40-wire parallel cable designed to interface National Instruments <u>AT-DIO-32F</u> and Intel 8255 based boards, to ELV I/O boards (VEGA launcher project), designing and implementing a bespoke 32 bit parallel high-speed data transmission
- Three-roller calender for metal pipes manufacturing, based on MOS Technology 6502 microprocessor, with rotary and linear encoders and two motors for each roller
- Ultrasound soldering machine for plastic materials (6502 based) with motorized soldering head, head pressure sensor, time based ultrasound emission
- X-ray photograph conveyor belt (6502 based) equipped with rotary and linear encoders, backlighted panel and two motors
- PROM-EPROM-EEPROM programming and substitution; microprocessor and integrated circuit handling such as memory upgrades, coprocessor installation, etc.
- > mounting and maintenance of PC keyboards and 6502 based PLC

professional e-mail: <u>giannipucillo@giannipucillo.it</u> - personal e-mail: <u>giannipucillo@gmail.com</u> career website: <u>http://www.giannipucillo.it/career</u> - professional website: <u>http://www.giannipucillo.it</u>