

SKILLS

- Market Research and Data Analysis
- Energy Economics
- Renewable energy technologies
- LFP battery cycling
- Hardware in Loop testing
- Electricity grid and market knowledge
- Simulations and Coding (MATLAB, R, Python, SQL, BASH, Batch, etc.)
- Machine Learning
- Failure Analysis
- Electrical schematics knowledge
- Report, academic and scientific writing
- Public presentation skills
- Teamwork and Leadership skills
- ABB Drives Products and Systems

CERTIFICATES

- Project Management Professional(PMP)
- Strategy Planning and Execution
- Customer Focus

PUBLICATIONS

- Numerical demonstration of a transactive energy trading model for microgrids
- Smart contract formation enabling energy-as-a-service in a virtual power plant
- EU electricity market design issues and solutions for increased RES penetration
- Blockchain for EU electricity market
- Aggregator based coordinated Transactive Energy trading between Microgrids
- Data Analysis of Building Sensors for Efficient Energy Management and Future Trends in the EU
- Energiasektori kese nihkub tulevikus lõpptarbija telefoni

LANGUAGES

- English (Native)
- Hindi (Native)
- French (Intermediate)

LINKEDIN

<https://www.linkedin.com/in/cletus-crasta-4a2119107/>

CLETUS JOHN CRASTA

cletuscrasta@yahoo.com | +372 53746538 | Tallinn, Estonia

Masters graduate in Electrical Engineering and Automation in Smart Grids and Buildings with an Energy Storage specialization and Ph.D. dropout in Blockchain for Energy Economics, actively seeking job opportunities in the Energy Sector or related fields.

Proven skills in large-scale data analysis, trend and pattern analysis, market research, writing, programming, asset testing and public presentation.

WORK EXPERIENCE

RELIABILITY TEST ENGINEER | ABB

Tallinn, Estonia | May 2022 to present

- Oversaw Hardware in Loop Testing of energy-efficient ABB drives at Estonia's Drives Reliability Center. Was responsible for 50 Drives and spread across 5 projects.
- Responsible for conducting all ORT (On-going Reliability Testing) and ALT (Accelerated Lifetime Testing) for all Drive Products (DPs) at the Drive Reliability Center (DRC) testing facility.
- Coordinating with different teams in ABB to stress-test new ABB DPs according to product manager's requirements before product launch.
- Conducting maintenance works to keep the testers running at near 100% efficiency and in line with product manager's test specifications.
- Assisting to conduct Failure Analysis (FA) of failed DPs both from DRC and from the Field at the ABB Estonia Quality Lab.
- Disseminating the documented knowledge from the FA cases and DRC to relevant teams through '1 page PPT' presentations, teams meetings or work visits to Helsinki.

RESEARCH AND DEVELOPMENT INTERN | CEREMA

Angers, France | Mar 2018 to July 2018

- Utilized data preprocessing and data visualization tools, e.g., Cluster analysis, ANOVA analysis, etc., on building sensor data.
- I have analyzed large continuous time-series sensor datasets in R language. Statistical analysis using ANOVA and cluster analysis.
- The aim is to understand and explain the indoor temperature as a function of other sensor data collected.
- Posters, reports, thesis reports, presentations, conference papers, etc., have been used to disseminate the information, methods, results, and key findings.

COURSES

- Energy Conversion for Renewable
- Energy Economics
- Generation and Storage
- Heat and Mass Transfers
- ICT for Smart Grids and Smart Cities
- Innovation
- Innovative Components for Smart Grids
- Modeling and Dispatch of Smart Power
- Philosophy of Science
- Research Methods and Experimental Techniques
- Smart Cities

RESEARCH AND DEVELOPMENT INTERN | UPOWA,

Grenoble, France | Jun 2017 to Aug 2017

- Constructed MATLAB codes to generate charging and discharging profiles for a battery cyclor to simulate a battery connected to a PV panel.
- To generate the Incremental Capacity Analysis (ICA) curves from experimental data generated from the battery cyclor to study the State of Health (SoH) of a cycled LFP battery.
- The MATLAB codes take inputs from a user, e.g., number of days, the SoC levels for the charge/discharge cycles, the duration of charge/discharge cycles, the number of current variations, etc..

CREATIVE ASSOCIATE | BYJU'S,

Bangalore Urban, Karnataka, India | Dec 2015 to July 2016

- Worked in Bangalore, India for Byju's, an Indian startup unicorn for online education in the position of Creative Associate.
- Responsibilities included educational content creation, video editing, and clear content communication for K12 students. Programming, communication, and creative skills were developed during this experience.

EDUCATION

Tallinn University of Technology, Tallinn, Estonia 2018
Ph.D. in Blockchain for Energy Economics (not completed) - 2022

- Developed a novel Transactive Energy (TE) trading algorithm to optimize microgrid resource sharing in the microgrid and between multiple microgrids.
- Authored various publications and was part of different technical working groups.
- I have also tested the effect of a Genetic Algorithm (GA) for consensus formation on the order of microgrids for coordinated resource sharing between them based on profitability, excess electricity, and no coordination (standalone microgrid) mode.

Grenoble INP - Ense3, Grenoble, France 2016
Master of Science in Electrical engineering and Smart grids - 2018

- Course specialization on Energy storage
- 6 months university-company research project for Sylfen to deliver recommendations on power electronic system designs for Sylfen's reversible Fuel Cell Stack.

Manipal Institute of Technology, Manipal, India 2011
Bachelor of Technology in Electronics and Communication Engineering - 2015

- Professional engineering course in India from one of the best private Engineering colleges in India forming my strong engineering basics.