

EMPLOYMENT

Software Developer

GlobalReader OÜ

January 2021 - Present

- Add new features for the existing IoT-based real-time application using Phoenix MVC, LiveView and Ecto
- Built a Real-time dashboard utilizing streamed data from multiple IoT devices and have done proper transformation from historic data to generate required metrics
- Built live help support to system's users via email, SMS, or mobile notification
- Built automated invoicing service based on the purchased feature set
- Participate in call monitoring activities for Grafana, Elastic, and Google cloud to monitor database load, hanging queries, error logs or pub-sub saturation
- Fix bugs in the application coming from clients regularly
- Support clients by implementing custom on-demand features and data
- JIRA tasks estimation for product improvement, bug fix, and custom client developments

Stack: Phoenix MVC, LiveView, Ecto, Elixir, JavaScript, Slime, bootstraps, Live-View hooks, Google Pub Sub, Phoenix Pub Sub, HighCharts, and PostgreSQL.

Software Engineer

BJIT Ltd.

January 2019 – July 2020

- Built windows-based tools for improving productivity and processing data for mechanical designers
- Reduced 60% running time of Flow Sheet Builder tool (the tool to create mechanical process flow drawings in AutoCAD) by optimizing code and structure with C# and VBA
- Analyze code for system testing and debugging; create test transactions to find, isolate and rectify issues
- Do software integration using application-provided API
- Working with MSSQL and Postgres databases
- Guiding fellow teammates technically to achieve project goals

Stack: C#, VBA, ASP.NET, MSSQL, PostgreSQL & Mechanical Design

Freelance Experience

Fiverr International Ltd.

January 2016 – December 2021

- Worked as a full stack developer for an e-commerce application using Phoenix framework based on elixir
- Developed Microsoft PowerPoint plugin that can export PowerPoint objects as JSON and generate HTML with that JSON using C#, interop, and open XML
- Built an audio detection tool that can recognize stored audios by listening on the microphone and can remove duplicate pieces of music from a directory with C#

Stack: Phoenix MVC, Phoenix LiveView, Elixir, PostgreSQL, Go, C#, VBA, Bootstrap, JavaScript, and HTML.

Application Support Engineer

BJIT Ltd.

February 2018 – December 2019

- Bug fixing or adding features to various macros developed for mechanical design applications
- Support users on issues with the custom tools or the application itself

Stack: Auto Lisp, Visual Basic, and Mechanical Design

Mechanical Design Engineer (AC Cooling)

Walton Hi-Tech Industries Ltd.

July 2015 – January 2018

- Developed a tool with C# to collect data from the air conditioner testing lab, calculate various required refrigeration properties & essential metrics, and provide an excellent graphical representation of the data for quick decision-making. It saved almost 25% development time of an air-conditioner model
- Developed a scheduling tool with ASP.Net for lab allotment and requisition
- Developed a residential cooling load calculator tool for easier selection of Air-Conditioner, available at <https://eplaza.waltonbd.com/index.php?route=api/api/btuCalculator>

Design & Process Engineer

Modern Erection Ltd.

Aug 2014 – July 2015

Mainly worked as a Mechanical Design Engineer but used my programming skills to solve day to day problems and made few tools with C++. Most significant one was for the calculation of material consumption of custom-made tanks and an efficient cutting length of metal plates.

EDUCATION

University of Tartu

M.Sc. in Software Engineering with CGPA 4.21(84%) out of 5

September 2020 – August 2022

Jahangirnagar University

Postgraduate Diploma in IT with CGPA 3.63 out of 4.00

May 2018-December 2019

Chittagong University of Engineering & Technology (CUET)

B.Sc. in Mechanical Engineering

March 2010 – October 2014

PROJECTS

- **Open-Source Bank Clone (2022):** Open-source bank clone named Kai-Bank was part of the group work in of my master's Project. We have done initial design to implementation phase and practiced agile approach for it. My role was to work as a backend developer and main technology stack was **Java Spring Boot** framework. Project is available here: <https://gitlab.com/pabasaraajw/kaibank-backend>
- **Construction Equipment rental service API (2021):** I have worked to develop a Manufacturing Equipment Rental Service API as a part of my enterprise software development course. This project is built by using **GoLang, Docker, Kafka, PostgreSQL, CI & CD**. Project is available in <https://github.com/masudme09/RentalServiceAPI>
- **Taxi booking System for Tartu (2020):** **Phoenix framework-based elixir** web application developed for parking space booking management. This project aims to follow agile practice and BDD and TDD. Repo: <https://github.com/masudme09/FindMeParkingSpot>
- **Building cost management software (2019):** It was part of my postgraduate degree project. This development aims to ease the management of building an apartment like home by some group of peoples. Main stack was **PHP Laravel, bootstrap and vanilla JavaScript**.

ADDITIONAL ACTIVITIES

- Participated in Google HashCode contest 2020 and placed top 30% of the team worldwide. Our team's name "PsycoCoders."
- Participated RoboRace competition arranged by RMA CUET in 2013 and got 2nd place in the country. My role was to write code with MikroC for controlling LDR-based sensors, line detection, and intelligent movement.

LANGUAGES AND TECHNOLOGIES

- **Current Focus:** Erlang OTP, distributed systems, DevOps
- **Previous Experience:** Elixir, Phoenix Framework, Phoenix Live-View, Ecto, Gherkin, BDD, TDD, PostgreSQL, F#, C#, GoLang, LINQ, XML, ASP.NET MVC, .NET Framework, WPF Application, VB, Git, CI/CD, Java, Python for ML, Virtual Reality with Godot, Auto Lisp, PML for Aveva PDMS, EKL for CATIA, C/C++, Fortran, MySQL, HTML, CSS, Bootstrap, React, JavaScript, jQuery, Ajax