

Philip Mateescu

I could label Philip as one of the finest software developers that I've ever met, but that would understate the magnitude of his talent.

Curtis Schlak, Vice President of Engineering —

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2014-2017

Enterprise Products

Technical Lead

3.8M

Lines of Code across 6 languages

5,000

Personal commits

30

People managed

\$150 million

Project budget

Philip is the Real Deal when it comes to software design experts.

— John Bowlin, Senior Systems Specialist

Built an oil, gas, and NGL logistics platform unparalleled in the industry

Lead two teams on the *Accounting* track to build end-cycle solutions that included:

- multi-stage billing pipelines capable on handling high throughput and complex distribution and contract billing scenarios;
- an invoicing service with PDF generation capabilities triggered both near-real-time and on an advanced schedule matrix;
- multi-level and multi-asset journal entry and end-of-month closing;
- journal entry creation and integration of account codes with Oracle Financial;
- ability to re-run and re-created historical billing scenarios.

Led the *Measurements and Material Balance* team in designing and implementing a large data acquisition and processing module to handle measurement, product movement across pipelines, storage, wells, tanking, chemical processing and calculations, as well as inventory, material balance, and over/short accounting.

Worked with business analysts to refine requirements and define scope; worked closely with QA to design testing plans and ensure coverage; worked with business experts to clarify and distribute business knowledge across development teams.

Increased technology knowledge across the project through presentations, classes, technology demos, tooling and deep-knowledge sharing.

Through coaching and mentoring and his individual contributions as a developer, Philip helped the team become one of the most productive teams on the project

— Richard Flores, Technical Director

Oil, Gas, and NGLs Transportation Logistics Accounting Invoicing Measurements Material Balance .NET 4.6 C# 6 ASP.NET MVC ReST API
Messaging Architecture Kendo UI Knockout.js Entity Framework MS SQL Server RabbitMQ NServiceBus

2009-2011 2012-2014

Bank of America Merrill Lynch

Technical Lead

8

Devs, BAs, & QAs

15

Markets

20,000

Trades daily

\$1.2+ billions

Processed yearly

Philip is one of the most passionate and driven developers I have had the pleasure to work alongside. He is an individual who is naturally able to strike a balance between on-time delivery and building perfect software, meaning on-time deliveries and great software is what can be expected from him.

— David Snow, Manager, Director

As the technical leader of the Sales & Trader Tools group, a two-team development division peaking at 12 developers, 3 BAs, and 3 QAs, I split my time between three primary activities:

- participating in functional requirements design sessions with stakeholders in the trading and sales organizations;
- designing and programming the most complex parts of the application; and,
- providing design, programming, and testing guidance for the members of my team.

Re-engineered the Trade Execution product from serving 2 commodities desks to 15 desks including natural gas, crude oil, power, coal, and base and precious metals. At the end of my first contract, 80% of the company's trades were captured and routed through my team's app. This increased to 95% of market-facing trades, and 100% of the sales' trades (flow business) by the end of the second bout.

We built a versatile and extensible integration framework to allow us to syndicate the users' application data to risk systems (including OpenLink Endur, SolArc, and CTP), pricing systems, market data (Index Online), and clearing houses (ICE, X-Trader, and Trayport). The integration framework also

subscribed to changes in external systems using file system watchers, database pollers, and by subscribing to events over TIBCO Rendezvous. The direct result of these improvements allowed trade and sales desks to reduce their wait on the risk assessment of their positions from waiting on the next day's calculations to mere minutes.

The desktop client, written in C# and using Infragistics controls, replaced five other trade capture interfaces. We built our own WinForms-based MVVM UI framework, closely modeled after WPF's, to streamline the develop of a homogenized user interface. Due to my work on defining a set of consistent interface guidelines, the business realized a 3x performance increase in trade capture.

Philip has a passion for his craft and his software is the evidence. Working with him was both influential and a good time due to his humor and on-demand critical thinking.

— Dustin Lyday, Software Engineer

Commodities Trading Financial and Physical Instruments Energy Trading Trade Execution Front Office Sales/Flow Business .NET 4.0 .NET 3.5 C# WinForms
MVVM WCF MS SQL Server Tibco EMS Infragistics OpenLink Endur Oracle

2012

Energy Solutions International

Senior Software Consultant

150 ms

Average API response

500 ms

Average page load

\$40.3 billion

Estimated market size

6

Products to be built on top of platform

As a consultant to ESI's energy trading group, I partly led and fully participated in the effort to build the base for ESI's next-generation, energy-trading platform. This moved the product from an application with high maintenance costs to a powerful, fast, scalable, and customizable Web-based application.

I made a good-looking UI too.

We designed the web application platform from the ground-up to function as a public ReSTful API communicating with the JSON message format into a pluggable back-end business and persistence layer built with ASP.NET MVC. This allowed us to independently and simultaneously develop the HTML+Bootstrap+jQuery+Kendo-based user interface of the products and the business rules engine that provided the commercial value of the products.

Applying SOLID design principles to the software allowed us to achieve a high level of automated test coverage across UI (JavaScript), API boundary, and internal business layer. As a direct result of this well-tested, high-coverage code, ESI could bring in expert teams for very concentrated development efforts while having a high degree of confidence that the new code would not negatively affect existing functionality. It also ensured that core development would not break the features developed by these expert teams.

Philip is inventive, diligent, and strives to improve his craft. I was constantly impressed by Philip's insights and his ability to quickly learn and apply new concepts. I saw in Phillip the talent to lead projects and teams.

— Scott Elder, Manager

Energy Trading Gas Production and Exploration Support Pipeline Management Gas Trading .NET 4.0 C# ASP.NET MVC 4 ReST API JavaScript Bootstrap
KnockOut JS jQuery Kendo UI Web JSON AutoFac MS SQL Server

2008-2009

BP

Senior Software Consultant

\$62 million

Cost of project

42

Devs, QAs, BAS

87%

Test coverage on own code

I worked on a large-scaled Gas Trading System for the North America Gas & Power division, in particular on a comprehensive yet very flexible gas nominations module where I contributed to all major modules and sub-systems. I championed the use of unit-testing and consistently had the highest code coverage in my team. I introduced the team to design patterns and worked with individual team members to improve the abstraction levels and reduce the coupling levels of the code they were tasked with.

I interfaced with teams working on connecting modules (scheduling, settlements) on integration points with the nominations module. As a result of my engineering skills, I was often loaned-out to other teams to assist with performance troubleshooting, advanced development efforts, and UI design.

In recognition of the quality of work performed, I was often asked to engineer, develop and provide architectural proof of concepts for next-gen solutions.

Nominations Gas Scheduling Settlements .NET 3.5 C# WinForms WCF MS SQL Server Tibco RV DevExpress OpenLink Endur Oracle SAP

1996-2008

Miscellaneous Companies

Senior Software Engineer & Consultant

I developed web and desktop application for clients in numerous fields — from legal, to banking, to media companies, to government agencies — in US and in multiple European countries.

.NET C# Python PHP JavaScript MS SQL Server MySQL PostgreSQL MS Reporting Services MS Analysis Services Oracle SAP Django

Projects

ManyBox

Main Developer

Hosted temporary, private email (similar to Mailinator).

Email

Node.js

TypeScript

React

Redux

Express

PostgreSQL

Mailgun

Amazon SES

Docker

Herman Park Conservancy

Consulting & Development

CMS with dynamic components

Other similar sites built for clients of a media company.

Non-profit

CMS

Django

JavaScript

django-cms

Python

Google Maps API

discogs-xml2db

Main Developer

Imports extremely large XML data dumps, into structured and document databases.

Data Import

Python

Node.js

PostgreSQL

MongoDB

LeaseMilesTracker

Main Developer

Projects allotted mileage for leased vehicles. (Tech listed for version in development)

Auto Leases

JavaScript

Vue.js

Docker

Elucirate

Consulting & Development

Decision making support for individuals, teams, and organizations.

Django

JavaScript

Python

Knockout

Heroku

squeaky

Fork, Main Developer

Lightweight web proxy based on A2 / PHPProxy

Proxy

Data Scrubbing

PHP

Javascript

showoff

Developer

Slack bot for reporting item statistics. Based on *Hubot* framework. Building a similar bot on *botkit* framework.

Slack bot

Node.js

CoffeeScript

JavaScript

Hubot

botkit

Docker

Rice Centennial

Consulting & Development

Multimedia experience celebrating Rice University's Centennial.

CMS

Django

JavaScript

Python

Google Maps API

Draw.io

Education

BS, CS & EE

Polytechnic University Bucharest

From the prestigious College of Computer Science and Engineering in Bucharest, Romania.

1994 – 1999

Data Science Certifications

Coursera

Curriculum from Johns Hopkins University

- Practical Machine Learning
- Exploratory Data Analysis
- Statistical Inference
- Regression Models
- Developing Data Products
- R Programming

2015-2016