# 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** | **5,000** | **30** | **$150 million** |
|---|---|---|---|
| Lines of Code across 6 languages | Personal commits | People managed | Project budget |

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.

`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** | **15** | **20,000** | **$1.2+ billions** |
|---|---|---|---|
| Devs, BAs, & QAs | Markets | Trades daily | 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

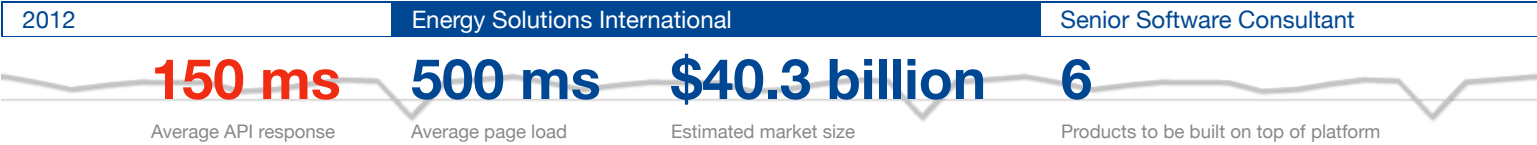`Commodities Trading` `Financial and Physical Instruments` `Energy Trading` `Trade Execution` `Front Office` `Sales/Flow Business` `.NET 4.0` `.NET 3.5` `C#` `WinForms` `MVVM` `WCF` `MS SQL Server` `Tibco EMS` `Infragistics` `OpenLink Endur` `Oracle`

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| 2012 | Energy Solutions International | Senior Software Consultant |

| **150 ms** | **500 ms** | **$40.3 billion** | **6** |
|---|---|---|---|
| Average API response | Average page load | Estimated market size | 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`

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| 2008-2009 | BP | Senior Software Consultant |

| **$62 million** | **42** | **87%** |
|---|---|---|
| Cost of project | Devs, QAs, BAs | Test coverage on own code |

I worked on a large-scoped 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`

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| **DataCert**<br>Team Co-Lead, Senior Software Engineer<br>2002-2006 | **Novosad Hayes Associates**<br>Team Co-Lead, Senior Software Engineer<br>2002-2006 | **Dynasty Technologies**<br>Senior Software Engineer<br>2001-2002 | **Misc European Companies**<br>Team Lead, Software Engineer<br>1996-2001 |
|---|---|---|---|

Web-based application to manage legal spending in 92% of *Global AmLaw 100* companies. Over 5,000,000 invoices processed, submitted from 140 countries.

Resposible for development, architecture, and mentoring within and cross-teams. Interfaced with Client Services and Customer Support teams.

Legal Spend Management
Legal Matter Management
Document Workflow
Discovery & Production Support
.NET  C#  Web
MS SQL Server
MS Reporting Services
MS SQL Server Analysis Services
Python  Django

Participated in the development of a large scale application for managing Veteran centers. Led the development efforts for a comprehensive solution to support financial arbitration and litigation efforts.

Litigation Support System
Discovery & Document Production
OCR Automation
Document Management  .NET
PHP  JavaScript
MS SQL Server  MySQL

C, C++, and .NET consulting.

.NET  C  C++  TCP/IP
MS SQL Server

Web and desktop development using Microsoft technologies for an array of large European clients.

.NET  MS SQL Server  Oracle
JavaScript  Web

# Education

## BA, CS & EE
Polytechnic University Bucharest

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

1994 – 1999