# Alexandre Nepomniachtchi

Sophis Senior Software Developer C++/C#, Java

# **EDUCATION**

1995: Research Engineer (Bac+6), theoretical physics, Ural State Technical University, Ekaterinburg

# TECHNICAL KNOWLEDGE

# **Programming languages**

C/C++ (VC++, GCC, SunCC, Watcom C, OOP, Design patterns, STL, Boost), Java, C#, Python, multi - threading

## **Quality Code**

Test Coverage, TDD, BDD

OS

Linux, Windows, Sun Solaris, Mac OS, QNX

## **Tools**

Sophis Risque, Sophis Value

# Methodology

Agile

## LANGUAGES

English: Fluent French: Fluent Russian: Native German: Beginner

# **EXPERIENCES**

(Freelance) Ural Electrochemical – remote from Paris as expert consultant : From 07/2022 to 04/2023

#### **Senior Consultant**

- > Integration as well, as job all the time
- > Create of project idea,
- > Create working model,
- > involved in different projects;
- > clean code

### **Technical Environment:**

C++, C#, Java, Python(rare)

(SSII) Tesselate: From 08/2021 to 07/2022

### **Senior Consultant**

Involved in different projects, coding in C++/C#.

## For BMCE Capital Gestion (BKG)

- ➤ Migration of Sophis ThinClient application from Sophis API version 7.3 to version 21.3.x;
- Change SOAP API to Rest API as communication method with Sophis Integration Service:
- > Implementation of new business request from client;
- > Some bug fixing.

## For BNP Paribas Cardif

- > Implementation of new business request from client;
- > Some bug fixing.

# (Freelance) Ural Electrochemical - remote from Paris as expert consultant : From 07/2017 to 12/2019

## Senior Software Developer, System CAM Consultant

- > Involved in different projects, coding in Java, C++/C#,
- > Code template development
- > Implementation of testing systems
- > Implementation simplified models
- > Algorithm translation
- > Clean code
- > Technical support

#### **Technical Environment:**

Visual C++ 2008 / 2013, C#, .NET 3.5 /4.5, Git, InteliJ IDE, VSCode.

## Lyxor Asset Management: From 01/2015 to 04/2017

## Senior Software Developer C++/C#

- Senior Sophis Toolkit developer for Sophis Value Toolkit migration from API Value v 4.3.2 to 7.2.
- Bug fixing
- > Add some new functionalities for user needs.
- New development for new type of funds (MANAC)
- Sophis Value Toolkit migration from v 4.3.2 to 7.2.1

### Technical Environment:

Visual C++ 2008 / 2013, C#, .NET 3.5 /4.5, Oracle 11g

# (Freelance) Ural Electrochemical – remote from Paris as expert consultant : From 01/2012 to 12/2014

### **Senior Consultant**

- ➤ Involved in different projects, coding in C++/C#, Java, SQL Lite, Eclipse, SWT.
- > Setup the development organization
- > Define the function of the different environments such as testing / dev / prod
- > involved in different projects,
- > code template development,
- > algorithm translation
- > clean code

Technical Environment: C++, C#, Java

### Sophis Technology Paris: From 1/2001 to 12/2011

### Senior Software Developer C++/C#, Java

- Senior software developer and project coordinator of Sophis Calculation Server project (Basic implementation the protocol for different Grid System software, also known as cloud computing. The premium implementation for Platform Symphony and DataSynapse).
- The new development in Sophis API for Calculation Server features (development of Calculation server since version 3.0, usually optimization or additional development for pricing data transfer between Sophis API and Calculation Server for different pricing models, optimization for low latency). First of all it was correct and very detailed exception handling and log implementation, these gave me possibility to find very fast places with problems, and also improve the performance. Use of JTCThread class simplify and speed up the porting process to Unix systems. The boost used in the pricing models which is also good for performance and calculation time optimization.
- Participation for .NET Sophis API refactoring and new development (Wrapping C++ Sophis API calls to make it possible to use in .NET applications)
- Sophis Data Server development (design server architecture with having in mind low latency and high frequency trading as priority 1st degree, the market data flow implementation for Reuters API). Server were designed based on client – server model with possibility to load implementation of market connectors for the different system as Reuters, Bloomberg etc.
- Participation for Sophis Contribution Server refactoring, optimization and new development (rewriting the part of publishing with Reuters API.)
- Participation for Sophis Framework development (smart pointers, input/output streams for different data types as basic ones and specific Sophis data types)
- Porting to Sun Solaris and Linux Sophis API (older versions. Refactoring software to correctly split on GUI and non GUI part. Optimize to use as much as possible only POSIX calls. Make the code confirm to at least ISO/IEC 14882:1998)

### Technical Environment:

Visual C++, Java, C#, ORBacus Corba, SunCC, gcc, Oracle, Reuters API, DataSynapse Grid Server API, Platform Symphony API, Windows, Solaris, Linux

Ural Electrochemical Integrated Plant (Russia): From 1995 to 2001

## **Senior Software Developer**

Design, implementation and maintaining of CAM system "C" for nuclear materials enrichment technology power supply systems including power supply equipment monitoring, control and management.

# Technical Environment:

QNX (real time OS designed for hard real time applications in military area, medicine, transport, etc.), Watcom C/C++, Sybase SQL, Photon GUI Environment