

Marat Subkhankulov

Senior Software Engineer at Nimble Storage

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Summary

I'm an up-and-coming technology professional with a suite of interests; Seeking to learn and make connections by tackling interesting and hard problems. I care most about creating value for my clients and the people I work with.

Experience

Software Engineer at Nimble Storage

September 2014 - Present (1 year 3 months)

Responsible for JSON-based REST API. Actively researching latest API and webservice technologies.

Acquiring skills in C++, Python, Perl and Linux toolchain. Authored proprietary API definition language based on XML. Used Postgres for efficient sorting, filtering, pagination and JSON marshalling. First version of REST API released to customers in April 2015.

Software Engineering Intern at Nimble Storage, Silicon Valley Internship Programme

August 2013 - September 2014 (1 year 2 months)

Year-long internship aimed at exposing me to the day-to-day running of Silicon Valley tech companies, company formation and entrepreneurial spirit. As part of the team at Nimble I develop the system management web GUI which enables admins to utilize the awesome power that is the Nimble Storage array. The GUI is built using GWT/Jetty, and interfaces with the array software using a SOAP API. JUnit and Selenium frameworks are used for the test suite. My daily tasks have involved breaking down feature requirements, scoping, design and implementation, bug-fixes.

Examination Marker at The University of Edinburgh

January 2013 - January 2013 (1 month)

Marked 1st year Computation and Logic examination papers.

Haskell Tutor at The University of Edinburgh

September 2012 - December 2012 (4 months)

Tutored a group of 12 students on Haskell programming. Explained course material and facilitated group learning.

Masters Level Java Programming Demonstrator at The University of Edinburgh

September 2012 - December 2012 (4 months)

Served as first-point of contact to masters students in lab sessions. Helped with practical understanding of Java. Marked assignments.

Ideas Lab participant at Scottish Institute for Enterprise

October 2012 - October 2012 (1 month)

In a team of five generated ideas for an e-commerce web service. Carried out market research by interviewing highstreet bystanders. Designed and delivered the final presentation.

Technology Summer Analyst at Morgan Stanley

June 2012 - August 2012 (3 months)

Undertook a 10 week project based internship in Post Trade Technology division. Developed RESTful, thin client application for regression testing of a large trade processing system via replaying trades. I analysed the code base available to me and heavily adapted an existing unfinished project to use as a platform. I worked closely with my team by presenting my tool early to the QA and DEV teams, who I identified as the target users. Following several iterations the program was integrated with an existing system the REST interface which I developed. Project went live and is now used by target users. Platforms: Ext JS, Java, Spring, JAXB, DB2, REST, SOAP. Tools: JIRA, Perforce, JUnit. The most enjoyable part of the internship was working closely with my manager, learning the development process and making new connections.

Game Programmer at Microsoft Imagine Cup: Game Design

January 2012 - March 2012 (3 months)

In a team of two programmers and a artist, developed a 2D isometric view turn-based game, coherent with the environmental theme of Imagine Cup. Used C# and XNA to create a light GUI framework for the game,

Competitor: Business analyst at Silicon Valley Comes to the UK Appathon

October 2011 - October 2011 (1 month)

Worked on a traffic reporting Android app in team of five. Took 2nd place out of 20 teams in regional competition. Developed business model.

Entrepreneurial Bootcamp Participant at Scottish Institute for Enterprise

July 2011 - July 2011 (1 month)

Developed a web-based landscaping designer business idea. Gained experience in pitching, creating a business plan, modelling the customer base.

Summer Intern at SimOps Studios

June 2010 - September 2010 (4 months)

Working on www.wildpockets.com – a Cloud based 3D Game creation tool. Self-proposed internship idea to develop tutorials for the company. Became competent in Lua scripting and the Wildpockets framework. Took responsibility for making subsystems tutorials. Developed five large tutorials which were published online at the end of the project.

Game Programmer at Microsoft Imagine Cup: Game Design

January 2010 - February 2010 (2 months)

In team of two programmers, a writer and an artist, created a web-based 2D platformer set in a post-apocalyptic world with a strong environmental message. C# and Silverlight.

Education

The University of Edinburgh

Master of Informatics, with Honours Informatics, 2008 - 2013

Grade: 1st

Activities and Societies: Game development society, Computer Science society, Tai Chi society

Projects

C++ REST API prototype

January 2014 to Present

Members: Marat Subkhankulov

- Prototyped REST-like API to inform SOAP-to-REST conversion - Integrated HTTP server with large code base - Gathered requirements, profiled and removed bottlenecks - HTTP server: POCO; Marshalling and JSON parsing: Boost;

An Autonomous Robot for Resource Location and Retrieval

September 2012 to December 2012

Members: Marat Subkhankulov, Austin Tobin

- Developed a resource collecting Lego drone - Visual processing w/ OpenCV - Multi-threaded C++ program using Pthreads - Non-trivial blending of strategy and sensor-reactive behaviours - Precise navigation using state-based AI

Biometric shirt using SOC

September 2011 to December 2011

Members: Marat Subkhankulov, Austin Tobin, Paul Pop, Peter Walsh

- Developed a biometric shirt. - Responsible for microcontroller programming in C. - Implemented accelerometer via I2C protocol. - Radio connection via SPI protocol

System Design Practical: Robot Football

January 2011 to April 2011

Members: Marat Subkhankulov, Karthik Srinivasan, Jennifer, Paul Pop, Jack, Victor Ivanov, Johanness, Euan, Dimitris, Alistair

- Built an autonomous robot football player. - Programmed in Java and tested using JUnit testing suite. - Led the team at the outset by organizing regular meetings to discuss project's progress, bring together ideas, create and adhere to fortnightly implementation plans. - Won the IBM award for Most Consistent System out of ten teams

Computer Science Practical: Android Scheduling App

September 2010 to Present

Members: Marat Subkhankulov

- Developed a scheduling app for undergraduate courses.
- Developed in Java and MySQL.
- Completed project from design to implementation

Skills & Expertise

C++

C

Java

SQL

Python

Game Programming

DB2

Ext JS

Game Design

Eclipse

Unix Shell Scripting

Spring

C# 4.0

HTML

JavaScript

C#

Programming

Software Engineering

Courses

Master of Informatics, with Honours Informatics

The University of Edinburgh

Computation and Logic

German

Data and Analysis

Functional Programming

Object-Oriented Programming

Algebra

Computational Algebra

Probability

Counting

Linear Algebra

Processing Natural and Formal Languages

Algorithms, Datastructures, Learning

Computer Systems and Software Engineering

Reasoning and Agents

Agent Based Systems

Algorithms and Data Structures

Database Systems

Computer Communications and Networks
Introductory Applied Machines Learning
Logic Programming
Natural Computing
Software Engineering with Objects and Components
System Design Project
Adaptive Learning Environments
Computer Animation and Visualization
Computer Graphics
Human-Computer Interaction
Informatics Research Methodologies
Parallel Programming Languages and Systems
System Level Integration Practical
Robotics: Science and Systems
Distributed Systems

Interests

Game development, Tai Chi, Rollerblading, Bass, Guitar, Singing

Certifications

SIE Ideas Lab

Scottish Institute of Enterprise October 2012

Languages

English

(Full professional proficiency)

Russian

(Native or bilingual proficiency)

Publications

Illustrator

Natures Play Things, Merlin Unwin February 1, 2008

Authors: Marat Subkhankulov, Alison Wilson Smith

Produced instructional ink illustrations to supplement the book content.

Volunteer Experience

Volunteer at Lothians Conservation Volunteers

November 2012 - Present (3 years 1 month)

Helped out with tree planting and brush clearing at 2 conservation sites close to Edinburgh.

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[Contact Marat on LinkedIn](#)