Izzat Mukhanov

Phone: +33 666 517 571
E-mail: izzatbek@gmail.com
Location: Paris, France

Work Experience

- **Software Development Engineer**   2016 – now
  - Kindle: Maintenance of reader applications for Mac and PC (Qt, C++) ~ 4 months
  - Prime Air: Autonomous 30 min delivery system by drones
    Successfully designed, implemented and delivered (used in production):
      - Highly scalable (multi-threaded) vehicle simulator that supports time accelerations.
      - Vehicle-agnostic autonomous path planning system.
    Significant contributions:
      - Improvement and maintenance of multiple AWS web services.
      - Operational (metric reporting, package management system, testing strategy, etc.).
      - Terrain client (to query terrain information for a geographical area) library.
  Company: **Amazon**

- **Engineer**, developer (C, C++, Python, JavaScript)   2014 – 2016
  Improvement and development of a cross-platform library libpointing
  which allows direct access to the USB-HID pointing devices
  and can apply different transfer functions to the raw input
  Creation of *Java*, *Python*, *Node.js* bindings and distribution with *npm*, *apt*, *brew*, etc.
  Company: INRIA

- **Master's Project** (C++, Python, MATLAB)   2014 (6 months)
  Implementation of Pedestrian Detection and Tracking system [thesis] [video]
  using Computer Vision and Machine Learning algorithms
  Laboratory: IRCCyN

- **Intern** (Python)   2013 (4 months)
  Development of OpenSymoro+ (SYmbolic MOdeling of RObots),
  including 3D visualization and UI using *PyOpenGL* and *wxPython*
  Laboratory: IRCCyN

- **Software developer** (Objective-C)   2011 – 2012
  Development of client-server applications for iOS and Cocos2D games
  Company: SSD

- **Intern**, software developer (C/C++)   2010 – 2011
  Low-level API development for Blu-ray disks processing
  Implementation of the logging system for the project
  Company: ProDVD

- **Intern**, software developer, instructor (C#.NET)   2009 – 2010
  Application development for book catalogization of the city libraries
  Database management (Microsoft SQL)
  Company: BePro

Education

- M.S. in Robotics, Control Engineering, Applied Informatics   2012 – 2014
  École Centrale de Nantes

- B.S. in Telecommunications   2007 – 2011
  Tashkent University of Information Technologies

Professional Skills

- Knowledgeable:
  - **Java, Python, C++**
  - Multi-threaded, real-time applications
  - AWS infrastructure
  - Design Patterns, Test Driven Development, Continuous Integration/Deployment
- Familiar:
  - Kafka, Websockets, Netty, Protobuf
  - JavaScript, Node.js, Three.js
  - MATLAB, Objective-C, Pharo, C#.NET, PHP, SQL
  - OpenGL, OpenCV
  - ROS (Robot Operating System)
- Theoretical background:
  - Path planning algorithms
  - Math, Optimization, Simulation
  - Computer Vision, Machine Learning, Artificial Intelligence
  - Robot Programming, Modeling and Control

Miscellaneous

- Highly adaptable in quickly changing technical environments with very strong organizational and analytical skills
- Excellent interpersonal and communications skills
- Life-long learning oriented
- Driver's license
- Publication: **OpenSYMORO : An open-source software package for Symbolic Modelling of Robots**, 2014 IEEE/ASME International Conference on Advanced Intelligent Mechatronics (355)

Languages

- English - fluent
- French - fluent
- Russian - native
- Uzbek - native

Hobbies

- Following online courses (MOOCs)
- Foreign languages
- Gym and cycling
- Reading