

# Igor Sotsugov

igor@sotsugov.com

sotsugov.com

Software engineer in test with experience within enterprise and start-up environments. Currently leading a team of Software Developer Engineers in Test. Advocates producing quality, intuitive, maintainable code with current best practice, and prefers to prove that a product correctly executes with empirical data. Experienced with agile methodologies, mentoring, release management, security, test engineering, automation, and quality assurance.

## SUMMARY OF TECHNOLOGIES

- **Python**—Used for a number of commercial software projects, scripts, packages, test frameworks, functional testing, process automation and tooling. Wrote games, web scrapers, test challenges, workflow optimisation scripts, data aggregators, and notification services
- **Web**—Front-end development using HTML, CSS, JavaScript; Django and Flask backend, some Redis and Celery experience
- **Databases**—MySQL, PostgreSQL, SQL Server, MongoDB, DynamoDB, some Google Cloud Datastore
- **DevOps**—Used AWS and Windows Azure to set up monitoring and infrastructure; deployed Flask and Django micro-framework services with dependencies; set up Skype reminder bot, Slack integrations for Jenkins CI build notifications; ran EC2 cloud gaming platform with Steam In-Home Streaming; set up Jenkins CI pipelines with coverage reports and for git
- **Operating Systems**—Experience automating development environment set-up for multiple platforms; cross-platform testing with physical and virtualised setups; established mobile lab across 15 devices for iOS, WP, and Android
- **Testing Frameworks**—Selenium Webdriver, BrowserMob Proxy, BrowserStack, some experience with Cucumber, Behave, SpecFlow, iOS (Quick, Nimble), JS (Grunt, Karma, Mocha), Android (Mockito/Powermock, Robolectric)
- **ML**—Experience in implementing and evaluating simplistic models using TensorFlow, Keras, some experience using libraries such as scipy, numpy, NLTK, spaCy, SimpleCV, scikit-learn
- **Agile**—Certified Scrum Member and Scrum Master, with 2 years of experience advocating Scrum within Continuous-delivery projects; Certified Kanban practitioner, lead multiple Kanban v-teams; pair-programming, BDD, TDD
- **Familiar**—Java, R, MatLab, RackSpace, Heroku, DigitalOcean

## EXPERIENCE

### Lead Software Development Engineer in Test, Nexmo, the Vonage API Platform

2014–\*, London, UK

- Recruited, coached and manage team of 17 (2017) engineers in test across three sites
- Created and contributed into testing framework, which scaled to contain over 15,000 scenarios
- Implemented python libraries of common test functionality, which can be used to simplify various processes across product, engineering and application support teams
- Created structure validator, used to validate API response structure against the type definition
- Established DoD, release policy, standardised verification processes, allowing a significant reduction of production incidents and reduced release cycle time

### Software Development Engineer in Test 2, Microsoft

2012–2014, London, UK

- Set up and managed a mobile device lab for testing product purchase flow with 15 physical devices, achieving 96% of overall platform coverage

- Raised automation coverage, stability and speed of functional test suite; quality reports improved by 30% (to over 300 scenarios at around 98% pass rate), bug age halved
- Promoted to Software Development Engineer in Test 2 in September 2012
- Gradually improved the regression testing reliability and execution time by creating pre-commit CI tasks as a part of a PBI sign-off process

#### **Software Development Engineer in Test, Skype**

2009–2012, Tallinn, Estonia

- Achieved *Teamwork Award* for enabling seamless integration with Sofort Banking payment system
- Reduced number of scenario duplicates in Skype for Business by 21%; optimised code structure and made use of page-object model, reducing 38% code lines, resulting in 41% increase of running time from an average successful run
- Led the test stabilisation initiative, which made product team to become highest in overall success rate (reached and maintained 98-100% passing regression test cases)

#### **Quality Assurance Engineer, SQA Partners**

2007–2009 Summer internships, Tallinn, Estonia

- Efficiently organised available resources to assist other engineers with demanding deadlines, which frequently gradually reduced overtime hours
- Introduced a localisation testing workflow with multiple screen comparison, resulting in productivity increase by an order of magnitude and overall simplification of testing process

### **EDUCATION**

#### **BSc (Hons) Information Technology, Middlesex University**

2007–2010, London, UK

- Created an educational game for children with learning difficulties, in association with University of Cambridge Autism Research Centre, which scored 2nd top of the class
- Established and led Envision Design Group, focused on exploring and implementing new techniques to accessibility and usability in education technology

### **CERTIFICATION**

2017, Neural Networks and Deep Learning, Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization, Structuring Machine Learning Projects, Coursera

2017, Deep Learning Nanodegree Foundation Program, Udacity

2017, Deep Learning by Google, Udacity

2017, Team Kanban Practitioner, by Jose Casal

2013, Coaching Testers, by James Bach and Anne-Marie Charrett

2012, Certified Scrum Engineer; Certified Scrum Master, by James Coplien

2010, Rapid Software Testing, by Michael Bolton

### **PROJECTS**

**Steampy**—Notification service for Steam wish-list price drops, which notifies user by text message, if the discount reaches a certain threshold. Python, Flask, MySQL, DigitalOcean

**PyPong**—Winner of Nexmo IoT Hackathon, collaboration project. PyPong is an interactive table tennis monitoring system. PyPong monitors ping pong ball bounce frequency to measure game longevity, total number of bounces, and longest rally. The results are displayed on the dashboard, if the table currently is in use, the notification service allows user to receive a text message when the table becomes available.

Raspberry Pi, Python, Flask, MySQL, AWS