Violetta Vylegzhanina

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Education

- **M.Sc., Vanderbilt University**, Computer Science Dept., USA. ***Dec'15***
  GPA: 4.0/4.0.
- **B.S., Vanderbilt University**, Computer Science Dept., USA. ***May'13***
  GPA: 3.7/4.0.

Work Experience

- **Oath (Yahoo!)**, *Big Data Tools Developer.* ***Oct'18-Present***
  - Building a highly scalable and robust next generation Big Data stack to power data processing needs.
- **CBS Interactive**, *Software Engineer.* ***May'17-Aug'18***
  - Worked with leading edge technologies to deliver scalable and reliable high performance API systems to millions of unique users per month.
    - Implemented custom monitoring services via Amazon CloudWatch.
    - Researched, evaluated, and applied new processes and methods to enrich existing applications.
    - Developed JUnit and Mockito test cases to improve code coverage.
    - Contributed to development of automation solutions that improve build and deployment systems and support continuous deployment/integration.
    - Contributed to the AWS migration of a product by evaluating technologies for efficient and secure storage and retrieval of sensitive information (e.g. Consul, Vault, AWS Parameter Store).
    - Designed and implemented an algorithm that significantly simplified code and reduced the execution time of a web feed parser by 50%.
- **HITactics, Inc.**, *Software Engineer.* ***Sep'15-May'17***
  - Provided high quality software services for indoor positioning and asset tracking solutions that relied on heterogeneous components, such as IoT.
  - Designed and developed a customizable and scalable event-driven system that processed realtime data streams (e.g. Amazon Kinesis) for purposes such as monitoring, analytics, and notifications.
  - Designed and developed a set of secure Portal REST APIs that simplified retrieving and modifying server data.
- **Change Healthcare**, *IT and Information Security Intern.* ***May'15-Aug'15***
  - Saved several months of manual work by developing a tool that instantly documented 4,000 of attack characteristics.
  - Lead the project to prevent the company's websites against online phishing attacks.
  - Performed dynamic assessments of client-facing applications and provided remediation strategies for detected vulnerabilities.
- **Institute for Software Integrated Systems**, *Research Assistant.* ***May'13-May'15***
  - Conducted research on system security and improvement of Java applications' effectiveness through remediation of security flaws.
    - Detected security flaws using machine learning WEKA library[1].

[1] http://www.cs.waikato.ac.nz/ml/weka/

  - Optimized method tracing by intercepting specific method calls at run-time to reduce noisy data.

· Developed an Android app that deals with often changing unstructured data to ease the shopping experience of WIC (Women, Infants, and Children).

  - Improved integration among mobile health solutions using *Open-mHealth*[2] and MongoDB database on Amazon EC2 that stores purchase data.
  - Developed data analytics solutions for shopping choices data stored in SQLite database to provide healthy tips that are customized for each user.

◇ **Schneider Electric**, *Engineering Intern.* ***Dec'11-Apr'13***

· Lead the reconstruction of test environment with automated test units in .NET.

· Integrated unit tests with the software development cycle.

Publications

V. Vylegzhanina, D. C. Schmidt, and J. White. **Gaps and Future Directions in Mobile Security Research**. In *Proceedings of the 3rd International Workshop on Mobile Development Lifecycle*, MobileDeLi 2015, pages 49–50, New York, NY, USA, 2015. ACM. ISBN 978-1-4503-3906-3. doi: 10.1145/2846661.2846669

V. Vylegzhanina, D. C. Schmidt, P. Hull, J. S. Emerson, M. E. Quirk, and S. Mulvaney. **Helping Children Eat Well via Mobile Software Technologies**. In *Proceedings of the 2Nd International Workshop on Mobile Development Lifecycle*, MobileDeLi '14, pages 9–16, New York, NY, USA, 2014. ACM. ISBN 978-1-4503-2190-7. doi: 10.1145/2688412.2688413

V. Vylegzhanina, D. Brett, and A. Gokhale. **Design Considerations in Developing a Mobile Application for Scalable and Decentralized Publish/Subscribe-based Weather Alert System**. In *Proceedings of the 2013 ACM Workshop on Mobile Development Lifecycle*, MobileDeLi '13, pages 21–26, New York, NY, USA, 2013. ACM. ISBN 978-1-4503-2603-2. doi: 10.1145/2542128.2542135

Skills

◇ *Languages:* Java (expert), C# (proficient), C++ (prior experience), JavaScript (prior experience), Python (prior experience).

◇ *DevOps:* Bamboo, Docker, Gradle, Git (GitHub/GitLab), JIRA, JUnit, Maven, Terraform, Vagrant.

◇ *Frameworks:* Spring, Retrofit, Hibernate, Vaadin, GWT.

◇ *Software:* Eclipse, IntelliJ IDEA, Visual Studio, Android Studio, HP WebInspect, Acunetix, HP Fortify on Demand.

◇ *Databases:* MySQL, PostgreSQL, MongoDB.

◇ *Cloud Computing:* Amazon Web Services (AWS).

Awards

Tau Beta Pi, Vanderbilt University, 2013.

Hobbies

Interior design, playing piano & violin, embroidery, cooking, and gardening.

[2] http://www.openmhealth.org/