**J-1 Intern Training Program**

**Phase 1**

**android application performance testing**

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| **Description of Intern’s Role**  The intern will initially learn tools and techniques to identify root causes of failure in Android applications. By the end of the phase, the intern will be able to help developers analyze software requirements, uncover fatal application issues, detect bugs and provide feedback the quality of the Android applications being released. |
| **Specific Goals and Objectives**  1) Analyze memory leaks in the Android merchant and consumer applications.  2) Identify performance bottlenecks in Android merchant and consumer applications.  3) Help in improving caching to speed up response times. |
| **Knowledge, Skills or Techniques Imparted**  Stress and load testing techniques, and analytical performance modeling. |
| **Cultural Activities**  The intern will participate in team events such as Bocce ball, Go-Kart, Foosball Tournaments and Trivia Nights. |
| **Teaching Method**  The intern will continuously shadow a Senior Software Engineer who will introduce the intern to new software technologies. The trajectory of the intern’s training will result in his ability to complete assigned tasks and provide consultation for technical guidance. |

**Phase 2**

**Android Application Test Automation**

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| **Description of Intern’s Role**  The intern will be exposed to Agile software development techniques. The intern will learn different metrics that provide insight to software quality. The intern will contribute by enhancing the existing Android application automated test suite. |
| **Specific Goals and Objectives**  1) Learn and administer automated build infrastructure.  2) Create automated tests to increase code cover by 20%. |
| **Knowledge, Skills or Techniques Imparted**  TDD (Test Driven Development) software methodology; Test automation frameworks (Cucumber, Robotium). |
| **Cultural Activities**  The intern will participate in team events such as Bocce ball, Go-Kart, Foosball Tournaments and Trivia Nights. |
| **Teaching Method**  TDD (Test Driven Development) is a popular software development methodology employed by startups in the San Francisco Bay Area. Since TDD is less known abroad, the intern will initially shadow the supervisor and/or Senior Software Engineers in order to learn about TDD principles. The intern will be exposed to collaborative meetings between Software Engineers and the intern will write test cases autonomously and contribute to the company's overall code coverage (a key metric for software quality). |

**Phase 3**

**Mobile Application Development**

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| **Description of Intern’s Role**  The intern will use all of the TDD (Test Driven Development) techniques learned in the previous phases to assist Software Engineers in building new software features with complete code coverage. |
| **Specific Goals and Objectives**  1) Work with Product Managers to gather feature requirements  2) Develop incremental features on Android mobile applications  3) Collaborate with backend developers and define device-independent APIs  4) Track progress via daily standups |
| **Knowledge, Skills or Techniques Imparted**  Android SDK and NDK; SCRUM process. |
| **Cultural Activities**  The intern will participate in team events such as Bowling, software conferences, internal/external hackathons. |
| **Teaching Method**  The intern will become an active collaborator along with other Software Engineers on the company's development team. The intern will develop code for the company's source code which will be reviewed by senior members of the company's development team. The intern will be provided with feedback to augment his overall software development experience. |

**Phase 4**

**Application Development Finalization**

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| **Description of Intern’s Role**  The intern will master the Agile development techniques learned throughout the training phase, and gradually transition his work to other developers. |
| **Specific Goals and Objectives**  1) Final features development on Android mobile applications  2) Code hand-off  3) Detailed documentation write-up |
| **Knowledge, Skills or Techniques Imparted**  Pair programming; writing clear and analytic documentation |
| **Cultural Activities**  The intern will participate in team events such as Bowling, software conferences, internal/external hackathons and company holiday party. |
| **Teaching Method**  The intern will master the code review process and complete development of his outstanding features. The intern will pair program with a senior member of the company's development team. Pair programming is designed to facilitate knowledge sharing and allow the intern to receive continuous feedback on the quality of code pulls and software documentation. |