Table of Contents

| Open Source Visualization and Reporting | |
|--|----|
| Code Review Analytics: WebKit as Case Study | 1 |
| Navigation Support in Evolving Open-Source Communities by a Web-Based Dashboard | 11 |
| Who Contributes to What? Exploring Hidden Relationships between FLOSS Projects | 21 |
| How Do Social Interaction Networks Influence Peer Impressions Formation? A Case Study | 31 |
| Drawing the Big Picture: Temporal Visualization of Dynamic Collaboration Graphs of OSS Software Forks | 41 |
| Open Source in Business Modeling | |
| Analyzing the Relationship between the License of Packages and Their Files in Free and Open Source Software | 51 |
| Adapting SCRUM to the Italian Army: Methods and (Open) Tools Franco Raffaele Cotugno and Angelo Messina | 61 |
| Applying the Submission Multiple Tier (SMT) Matrix to Detect Impact on Developer Interest on Open Source Project Survivability | 70 |
| FOSS Service Management and Incidences | 76 |
| Open-Source Software Entrepreneurial Business Modelling Jose Teixeira and Joni Salminen | 80 |



Open Source in Mobile and Web Technologies

| Towards Understanding of Structural Attributes of Web APIs Using Metrics Based on API Call Responses | 83 |
|--|-----|
| Andrea Janes, Tadas Remencius, Alberto Sillitti, and Giancarlo Succi | 00 |
| Open Source Mobile Virtual Machines: An Energy Assessment of Dalvik vs. ART | 93 |
| Improving Mozilla's In-App Payment Platform | 103 |
| A Performance Analysis of Wireless Mesh Networks Implementations Based on Open Source Software | 107 |
| Use of Open Software Tools for Data Offloading Techniques Analysis on Mobile Networks | 111 |
| Open Source in Education and Research | |
| Crafting a Systematic Literature Review on Open-Source Platforms Jose Teixeira and Abayomi Baiyere | 113 |
| Considerations Regarding the Creation of a Post-graduate Master's Degree in Free Software | 123 |
| Lessons Learned from Teaching Open Source Software Development Becka Morgan and Carlos Jensen | 133 |
| A Successful OSS Adaptation and Integration in an e-Learning Platform: TEC Digital | 143 |
| Smart TV with Free Technologies in Support of Teaching-Learning Process | 147 |

| Development Processes of Open Source Products | |
|---|-----|
| Barriers Faced by Newcomers to Open Source Projects: A Systematic Review | 153 |
| Does Contributor Characteristics Influence Future Participation? A Case Study on Google Chromium Issue Tracking System | 164 |
| A Layered Approach to Managing Risks in OSS Projects | 168 |
| A Methodology for Managing FOSS Migration Projects | 172 |
| The Agile Management of Development Projects of Software Combining Scrum, Kanban and Expert Consultation | 176 |
| Testing and Assurance on Open Source Projects | |
| An Exploration of Code Quality in FOSS Projects | 181 |
| Polytrix: A Pacto-Powered Polyglot Test Matrix | 191 |
| Flow Research SXP Agile Methodology for FOSS Projects | 195 |
| How to Support Newcomers Onboarding to Open Source Software Projects | 199 |
| Global Impact on Open Source Communities and Development | |
| The Census of the Brazilian Open-Source Community | 202 |
| Cuban GNU/Linux Nova Distribution for Server Computers | 212 |

| A Study of the Effect on Business Growth by Utilization and Contribution of Open Source Software in Japanese IT Companies Tetsuo Noda and Terutaka Tansho | 216 |
|---|-----|
| Case Studies and Demonstrations of Open Source Projects | |
| USB Device Management in GNU/Linux Systems | 218 |
| PROINFODATA: Monitoring a Large Park of Computational Laboratories | 226 |
| Cleide L.B. Possamai, Diego Pasqualin, Daniel Weingaertner, Eduardo Todt, Marcos A. Castilho, Luis C.E. de Bona, and Eduardo Cunha de Almeida | |
| Book Locator: Books Manager | 230 |
| Automation of Agricultural Irrigation System with Open Source | 232 |
| When Are OSS Developers More Likely to Introduce Vulnerable Code Changes? A Case Study | 234 |
| Author Index | 237 |