The Art and Science of Analyzing Software Data

Description: The Art and Science of Analyzing Software Data provides valuable information on analysis techniques often used to derive insight from software data. This book shares best practices in the field generated by leading data scientists, collected from their experience training software engineering students and practitioners to master data science.

The book covers topics such as the analysis of security data, code reviews, app stores, log files, and user telemetry, among others. It covers a wide variety of techniques such as co-change analysis, text analysis, topic analysis, and concept analysis, as well as advanced topics such as release planning and generation of source code comments. It includes stories from the trenches from expert data scientists illustrating how to apply data analysis in industry and open source, present results to stakeholders, and drive decisions.

- Presents best practices, hints, and tips to analyze data and apply tools in data science projects
- Presents research methods and case studies that have emerged over the past few years to further understanding of software data
- Shares stories from the trenches of successful data science initiatives in industry

Contents:

Past, Present, and Future of Analyzing Software Data

Part 1 TUTORIAL-TECHNIQUES

Mining Patterns and Violations Using Concept Analysis

Analyzing Text in Software Projects

Synthesizing Knowledge from Software Development Artifacts

A Practical Guide to Analyzing IDE Usage Data

Latent Dirichlet Allocation: Extracting Topics from Software Engineering Data

Tools and Techniques for Analyzing Product and Process Data

PART 2 DATA/PROBLEM FOCUSSED

Analyzing Security Data

A Mixed Methods Approach to Mining Code Review Data: Examples and a Study of Multicommits and Pull Requests

Mining Android Apps for Anomalies

Change Coupling Between Software Artifacts: Learning from Past Changes

PART 3 STORIES FROM THE TRENCHES

Applying Software Data Analysis in Industry Contexts: When Research Meets Reality

Using Data to Make Decisions in Software Engineering:

Providing a Method to our Madness

Community Data for OSS Adoption Risk Management

Assessing the State of Software in a Large Enterprise: A 12-Year Retrospective
Lessons Learned from Software Analytics in Practice

PART 4 ADVANCED TOPICS

Code Comment Analysis for Improving Software Quality

Mining Software Logs for Goal-Driven Root Cause Analysis

Analytical Product Release Planning

PART 5 DATA ANALYSIS AT SCALE (BIG DATA)

Boa: An Enabling Language and Infrastructure for Ultra-Large-Scale MSR Studies

Scalable Parallelization of Specification Mining Using Distributed Computing

Ordering:

Order Online - [http://www.researchandmarkets.com/reports/3329021/](http://www.researchandmarkets.com/reports/3329021/)

Order by Fax - using the form below

Order by Post - print the order form below and send to

Research and Markets,
Guinness Centre,
Taylors Lane,
Dublin 8,
Ireland.
Fax Order Form
To place an order via fax simply print this form, fill in the information below and fax the completed form to 646-607-1907 (from USA) or +353-1-481-1716 (from Rest of World). If you have any questions please visit http://www.researchandmarkets.com/contact/

Order Information
Please verify that the product information is correct.

Product Name: The Art and Science of Analyzing Software Data
Web Address: http://www.researchandmarkets.com/reports/3329021/
Office Code: SCD23HYI

Product Format
Please select the product format and quantity you require:

<table>
<thead>
<tr>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard Copy (Paper back): ☐ USD 58 + USD 29 Shipping/Handling</td>
</tr>
</tbody>
</table>

* Shipping/Handling is only charged once per order.

Contact Information
Please enter all the information below in BLOCK CAPITALS

Title:  Mr ☐ Mrs ☐ Dr ☐ Miss ☐ Ms ☐ Prof ☐
First Name: __________________________ Last Name: __________________________
Email Address: * __________________________
Job Title: __________________________
Organisation: __________________________
Address: __________________________
City: __________________________
Postal / Zip Code: __________________________
Country: __________________________
Phone Number: __________________________
Fax Number: __________________________

* Please refrain from using free email accounts when ordering (e.g. Yahoo, Hotmail, AOL)
Payment Information

Please indicate the payment method you would like to use by selecting the appropriate box.

☐ Pay by credit card: You will receive an email with a link to a secure webpage to enter your credit card details.

☐ Pay by check: Please post the check, accompanied by this form, to:
Research and Markets,
Guinness Center,
Taylors Lane,
Dublin 8,
Ireland.

☐ Pay by wire transfer: Please transfer funds to:
Account number 833 130 83
Sort code 98-53-30
Swift code ULSBIE2D
IBAN number IE78ULSB98533083313083
Bank Address Ulster Bank,
27-35 Main Street,
Blackrock,
Co. Dublin,
Ireland.

If you have a Marketing Code please enter it below:

Marketing Code: __________________________

Please note that by ordering from Research and Markets you are agreeing to our Terms and Conditions at http://www.researchandmarkets.com/info/terms.asp

Please fax this form to:
(646) 607-1907 or (646) 964-6609 - From USA
+353-1-481-1716 or +353-1-653-1571 - From Rest of World