More Info on Patterns & Frameworks

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Topics Covered in this Module

- Twenty years ago there wasn't much info available on software patterns
 - e.g., some early papers on software patterns include
 - P. Coad, "Object-Oriented Patterns," Communications of the ACM, 9/92
 - R. Johnson, "Documenting Frameworks using Patterns," OOPSLA '92
 - Gamma, Helm, Johnson, Vlissides, "Design Patterns: Abstraction & Reuse of Object-Oriented Design," ECOOP '93





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- Coverage of software frameworks starts even further
 - e.g., some early papers on software frameworks include
 - R. Johnson & B. Foote, "Designing Reusable Classes", Journal of Object-Oriented Programming, '88
 - G. Andert, "Object Frameworks in the Taligent OS," IEEE Compcon, '94





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- This module provides pointers to some of the ever growing literature on these topics that have emerged over the past several decades





Some Software Pattern Books

- Design Patterns: Elements of Reusable Object-Oriented Software, Gamma, et al., 0-201-63361-2
- Pattern-Oriented Software Architecture, Vol. 1, Buschmann, et al., 0-471-95869-7
- Pattern-Oriented Software Architecture, Vol. 2, Schmidt, et al., 0-471-60695-2
- Pattern-Oriented Software Architecture, Vol. 3, Jain & Kircher, 0-470-84525-2
- Pattern-Oriented Software Architecture, Vol. 4, Buschmann, et al., 0-470-05902-8
- Pattern-Oriented Software Architecture, Vol. 5, Buschmann, et al., 0-471-48648-5
- Software Architecture: Perspectives on an Emerging Discipline, Shaw, et al., 0-131-82957-2





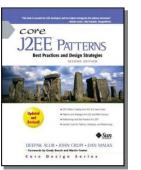
Some Software Pattern Books (cont'd)

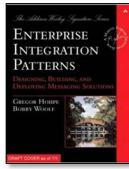
- Pattern Hatching, Vlissides, 0-201-43293-5
- Core J2EE Patterns, Alur, et al., 0-131-42246-4
- Enterprise Integration Patterns,
 Hohpe & Wolfe, 0-321-20068-3
- Server Component Patterns, Voelter, et al., 0-470-84319-5
- Patterns for Parallel Software Design, Ortega-Arjona, 0-470-69734-2
- Patterns for Fault Tolerant Software, Hanmer, et al., 0-470-31979-8
- Security Patterns, Schumacher, et al., 0-470-85884-2



















Some Software Pattern Books (cont'd)

- Pattern Languages of Program Design
 - Vol. 1, Coplien, et al., eds., 0-201-60734-4
 - Vol. 2, Vlissides, et al., eds., 0-201-89527-7
 - *Vol. 3,* Martin, et al., eds., 0-201-31011-2
 - Vol. 4, Harrison, et al., eds., 0-201-43304-4
 - Vol. 5, Manolescu, et al., eds., 0-321-32194-4
- *Small Memory Software,* Noble & Weir, 0-201-59607-5
- Concurrent Programming in Java, 2nd ed., Lea, 0-201-31009-0

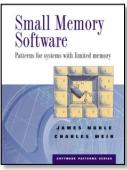


Concurrent Programming in Java[®] Second Edition







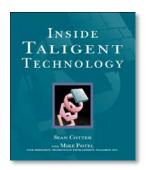


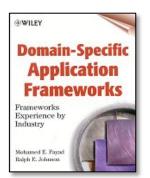


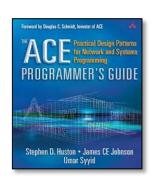


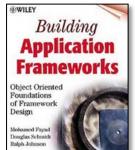
Some Software Framework Books

- Inside Taligent Technology, Cotter, et al., 0-201-40970-4
- Building Application Frameworks, Fayad, et al., 0-471-24875-4
- *Implementing Application Frameworks,* Fayad, et al., 0-471-25201-8
- *Domain-Specific Application Frameworks,* Fayad, et al., 0-471-33280-1
- C++ Network Programming Vol 1., Schmidt, et al., 0-201-60464-7
- C++ Network Programming Vol 2., Schmidt, et al., 0-201-79525-6
- The ACE Programmer's Guide, Huston, et al., 0-201-69971-0

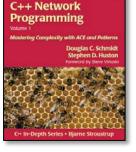


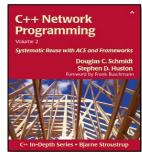
















Pattern Conferences

 The Hillside Group Sponsors many different conferences



- e.g., PLoP, EuroPLoP,
 AsianPLoP, ScrumPLoP, VikingPLoP, SugarLoafPLoP, UP, & ChiliPLoP,
- These conferences focus on writers workshops to better improve patterns through group exposure
 - See <u>www.dre.vanderbilt.edu/~schmidt/writersworkshop.html</u> for more information on writers workshops
- Each conference offers advanced topics for more adept pattern writers
- Participants have the opportunity to refine & extend their patterns with help from knowledgeable patterns enthusiasts



Pattern Mailing Lists

- patterns@cs.uiuc.edu: present & refine patterns
- patterns-discussion@cs.uiuc.edu: general discussion
- gang-of-4-patterns@cs.uiuc.edu: discussion on Design Patterns
- siemens-patterns@cs.uiuc.edu: discussion on Pattern-Oriented Software Architecture
- ui-patterns@cs.uiuc.edu: discussion on user interface patterns
- business-patterns@cs.uiuc.edu: discussion on patterns for business processes
- ipc-patterns@cs.uiuc.edu: discussion on patterns for distributed systems



Summary

- Other material I've created on patterns & frameworks
 - www.dre.vanderbilt.edu/~schmidt/ patterns-frameworks.html
- My pattern & framework courses
 - www.dre.vanderbilt.edu/ ~schmidt/courses.html
- My pattern & framework books
 - www.dre.vanderbilt.edu/ ~schmidt/POSA
 - www.dre.vanderbilt.edu/ ~schmidt/ACE
- Presentations I've given on patterns & frameworks
 - www.dre.vanderbilt.edu/ ~schmidt/multimedia.html

- Open-source software I've built based on patterns & frameworks
 - www.dre.vanderbilt.edu/ACE
 - www.dre.vanderbilt.edu/TAO

