

The Agile Movement ... is NOT very Agile! • by Mike Beedle • A co-author of the Agile Manifesto challenges the movement he helped start.

Feature Toggles • by Darren Sim • Feature Toggles were a common technique twenty years ago. It's time to bring them back.

Defining MVP, MMF, MMP, and MMR • by Scott Ambler • These four terms are often misused. Keeping the terms straight will help keep your development efforts on track.

Net Neutrality • by Michael Swaine • Your editor thought he understood the net neutrality debate pretty well. Then he did some research.



COLUMNS

Swaine's World • by Michael Swaine • Cryptocurrencies, the history of online, and other stuff Mike found interesting this month. Also a puzzle.

New Manager's Playbook • by Marcus Blankenship • Marcus shares tips on how to be as good at managing as you are at your "real" job. This month he talks about onboarding.

Johanna on Managing Product Development • by Johanna Rothman • Feel less pressure from the backlogs, roadmaps, and project portfolio, and increase your throughput.

Shady Illuminations • by John Shade • John fearlessly predicts the major tech developments of 2018.

BOOKS

Antonio on Books • by Antonio Cangiano • Antonio delivers this month's collection of new tech books.

The BoB Pages • by BoB Crew • What's new at the Pragmatic Bookshelf and The Prose Garden. Top-selling books. Author events. Back issues. Solution to puzzle.

Plus: **On Tap** • What's in this issue.

Explain It! • by Russ Olsen • Explaining is a professional skill you can learn and get better at.

Clojure for Full Stack Development • by Paul Butcher • A modern full stack developer needs to be able to write code that runs in three very different environments; back-end, web client, and mobile client.

Just Enough Clojure • by Paul Butcher • Paul gives you all the Clojure chops you need to follow his new series on Clojure for full stack development.

Discrete Event Simulation • by Dmitry Zinoviev • Computer modeling and simulation is the art of bringing to life systems and behaviors that otherwise are prohibitively expensive, unethical, or just impossible to build.



COLUMNS

Swaine's World • by Michael Swaine • The phone-powered nose-hair trimmer and other innovations of 2018.

New Manager's Playbook • by Marcus Blankenship • Marcus shares tips on how to be as good at managing as you are at your “real” job. This month he talks about the fabled big rewrite.

Shady Illuminations • by John Shade • John on “too big: will fail.”

BOOKS

Antonio on Books • by Antonio Cangiano • Antonio delivers this month's collection of new tech books.

The BoB Pages • by BoB Crew • What's new at the Pragmatic Bookshelf and The Prose Garden. Top-selling books. Author events. Back issues. Solution to puzzle.

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Clojure for Full Stack Development • by Paul Butcher • A modern full stack developer needs to be able to write code that runs in three very different environments: back-end, web client, and mobile client.

Code as Prose • by Jay Wengrow • Jay sets out to write code so that it resembles prose as much as possible.

SOAPBOX

Fifty-two Stories in Fifty-two Weeks • by Bruce Tate • Bruce gets on the *PragPub* Soapbox to present you with two challenges.

COLUMNS

Swaine's World • by Michael Swaine • Mike reflects on the importance of a famous essay by FDR's Science Advisor and on the status of the ongoing project to build the World's First Computer.

New Manager's Playbook • by Marcus Blankenship • You're a developer, but you're at a point in your career where you find yourself managing others. Marcus shares tips on how to be as good at managing as you are at your "real" job. This month he talks about help that isn't helpful.

Shady Illuminations • by John Shade • John's not talking.

BOOKS

Antonio on Books • by Antonio Cangiano • *Domain Modeling Made Functional* and other new tech books.

From the Pragmatic Bookshelf • by BoB Crew • An excerpt from *Getting Clojure* plus the top sellers and author events from The Pragmatic Bookshelf.

Plus: **On Tap** • **The *PragPub* Puzzle** • **The BoB Page**



The Impossible Every Day • by Tim Ottinger • It's just common sense. You can't do that — until you do.

Closure for Full Stack Development • by Paul Butcher • A modern full stack developer needs to be able to write code that runs in three very different environments; back-end, web client, and mobile client.

In Which I Get Hacked • by Erica Sadun • Erica gets hacked and shares a blow-by-blow account of how she dealt with it.

SOAPBOX

Dark Scrum • by Ron Jeffries • Ron gets on the *PragPub* Soapbox to discuss what hills are worth dying on.

COLUMNS

Swaine's World • by Michael Swaine • What's so funny, Alexa?

Technically Awake • by Russ Olsen • In his new monthly column, Russ reflects on programming languages.

New Manager's Playbook • by Marcus Blankenship • Marcus shares tips on how to be as good at managing as you are at your "real" job. This month he talks about shifting your work paradigm for the better.

Shady Illuminations • by John Shade • They're gathering intelligence. Got any?

BOOKS

Antonio on Books • by Antonio Cangiano • Learning Haskell will make you a better Python, JavaScript, or C# programmer.

From the Pragmatic Bookshelf • An excerpt from *Java by Comparison* plus the top sellers and author events from The Pragmatic Bookshelf.

Plus: **On Tap** • **The *PragPub* Puzzle** • **The BoB Page**



Clojure for Full Stack Development • by Paul Butcher • A modern full stack developer needs to be able to write code that runs in three very different environments; back-end, web client, and mobile client. In this final article in his series, Paul shows how to build mobile apps in Clojure.

Mistakes Rails Developers Make in Elixir • by Desmond Bowe • Elixir has many constructs for doing work asynchronously. Learn them and use them!

Data Is the New Oil • by Michael Nygard • Just as oil production led to new uses of oil that reshaped everything from consumer products to food production to hygiene, data-fueled ML models will reshape this century.



SOAPBOX

Show and Tell • by Daniel Steinberg • The *PragPub* Soapbox is your space in our pages to sound off on an issue of importance to you. This month, Daniel Steinberg offers Apple some advice on playgrounds.

COLUMNS

Swaine's World • by Michael Swaine • The U.S. Congress fixed the internet. Feel safer now?

Technically Awake • by Russ Olsen • Recapture the wonder you felt when you first learned to program.

New Manager's Playbook • by Marcus Blankenship • Ideas are precious. Offering them is risky.

Shady Illuminations • by John Shade • Facebook rolls out a new feature, and John doesn't hate it.

BOOKS

Antonio on Books • by Antonio Cangiano • You'll feel a lot better when you've mastered CSS.

From the Pragmatic Bookshelf • An excerpt from *Rediscovering JavaScript* plus the top sellers and author events from The Pragmatic Bookshelf.

Plus: **On Tap** • **The *PragPub* Puzzle** • **The BoB Page**

I Wrote My Way Out • by Erin Dees • To be an effective leader, don't emulate other leaders. Figure out what unique contribution you bring to the table.

Auto Layout, Playgrounds, and Xcode • by Erica Sadun • Our favorite Swift wizard turns the answer to a question about centering a view into high-level advice on when to use or not to use playgrounds.

Personal Project • by Erica Sadun • This is one of those “It occurred to me that I could probably put something together using things we already had around the house” how-to articles. We love those.

The Soirée • by Michael Swaine • This is basically all true. I can't confirm that Darwin was present on that particular day, but he was a frequenter of Babbage's soirées at that exact time, at least in part to chat up the ladies.



SOAPBOX

Your Message Here • by You Yourself • The *PragPub* Soapbox is your space in our pages to sound off on an issue of importance to you.

COLUMNS

Swaine's World • by Michael Swaine • Deep linking won. Context lost.

Technically Awake • by Russ Olsen • One program may look almost like another, but take a whole freaking lot longer to run. There is actually a technical term for “whole freaking lot.”

New Manager's Playbook • by Marcus Blankenship • One-on-one meetings are hard to get right. But getting them wrong can be disastrous for morale. So learn to fake it.

Shady Illuminations • by John Shade • The unanswered question about self-driving cars: Who ya gonna blame?

BOOKS

Antonio on Books • by Antonio Cangiano • What life as a developer looks like.

From The Pragmatic Bookshelf • An excerpt from *Docker for Rails Developers* plus the top sellers and author events from The Pragmatic Bookshelf.

Plus: **On Tap** • **The *PragPub* Puzzle** • **The BoB Page**

The Pragmatic Path • by Jeff Langr • Jeff reflects on what pragmatic programming means as this magazine enters its tenth year and The Pragmatic Programmer enters its twentieth.

When Best Practices Can Hurt You • by Novi Milenkovic • Best practices, followed blindly, can give you false confidence. And the average user does not exist.

Tom Watson, Howard Aiken, and Who? • by Michael Swaine • Last month we attended a soirée at the home of Charles Babbage. This month we attend a festive event in the basement of Harvard's Cruft Laboratory at 6 Oxford Street in Cambridge, Massachusetts.



COLUMNS

Swaine's World • by Michael Swaine • In which Mike loses his job and offers you career advice. Originally written Tuesday, May 12, 2009.

Technically Awake • by Russ Olsen • How many M&Ms does it take to equal the weight of the Sun?

New Manager's Playbook • by Marcus Blankenship • If it was good enough for Henry Ford...

Shady Illuminations • by John Shade • We need to lock up Jerry Seinfeld and James Corden.

BOOKS

Antonio on Books • by Antonio Cangiano • *The Rust Programming Language*. Plus 19 other new tech books.

From The Pragmatic Bookshelf • An excerpt from *Programming Phoenix 1.4* plus the top sellers and author events from The Pragmatic Bookshelf.

Beyond the Fields We Know • by Michael Swaine • RIP Harlan Ellison.

Plus: **On Tap** • **The PragPub Puzzle** • **The BoB Page**

Why I Dig Pre-ES6 JavaScript • by Chris Strom • Chris appreciates new language features, but not when he's teaching.

The Best Open Source Project for Someone Might Not Be Yours • by Andy Lester • Andy's proud of ack, his grep-like code searching tool. So his recommendation might seem odd ...

Computers Counting People • by Michael Swaine • In the past two installments of this series, we looked at Charles Babbage's dream of a computer and at Howard Aiken's attempt to realize the dream. This time, we look at some efforts to make the dream pay off.



COLUMNS

Swaine's World • by Michael Swaine • Mike shares some writing advice.

Technically Awake • by Russ Olsen • Floating point math isn't real — but it is very useful, just the same.

New Manager's Playbook • by Marcus Blankenship • Say yes to feature requests.

Shady Illuminations • by John Shade • John thinks people are the problem.

BOOKS

Antonio on Books • by Antonio Cangiano • *Reactive Application Development*. Plus 29 other new tech books.

From The Pragmatic Bookshelf • An excerpt from *Release It! Second Edition* plus the top sellers and author events from The Pragmatic Bookshelf.

Beyond the Fields We Know • by Michael Swaine • An interview with Andy Hunt about science fiction, writing, and his novel *Conglommora*.

Plus: **On Tap** • **The PragPub Puzzle** • **The BoB Page**

Reinforcement Learning Versus Supervised Learning • by Paolo Perrotta • Machine learning is getting better all the time. Here's one approach that works well.

Genetic Algorithms • by Frances Buontempo • Machine learning encompasses a variety of techniques. One of the most intriguing is genetic algorithms.

Remembering Jerry Weinberg • by Marcus Blankenship • Marcus remembers a colleague and inspiration.

Jerry Weinberg's Impact On Me • by Dave Hoover • Dave remembers Jerry Weinberg.

Computers on Campus • by Michael Swaine • In the past three installments of this series, we looked at Charles Babbage's dream of a computer, at Howard Aiken's attempt to realize the dream, and at some early efforts to make the dream pay off. This month we focus on the '60s, when computers were both reviled and coveted by college students, punch cards coexisted with timesharing terminals, and a bunch of student radicals could buy their own computer.



COLUMNS

Swaine's World • by Michael Swaine • The Julia language is worth a look.

Technically Awake • by Russ Olsen • Great things can come from fun weekend projects.

New Manager's Playbook • by Marcus Blankenship • Quality is always political.

Shady Illuminations • by John Shade • Artificial intelligence shouldn't be modeled on humans.

BOOKS

Antonio on Books • by Antonio Cangiano • Remaining relevant. Plus 29 other new tech books.

From The Pragmatic Bookshelf • The top sellers and author events from The Pragmatic Bookshelf.

Beyond the Fields We Know • by Michael Swaine • A challenge to explore the complete science fiction writings of P. J. Plauger.

Plus: **On Tap** • **The PragPub Puzzle** • **The BoB Page**

Uncle Bob, You're Wrong • by Daniel Markham • The Agile Manifesto is a management how-to document, not a technical one.

Improvement Boards • by Allen Holub • We can do better than a biweekly retrospective. Let's replace it with a continuous process that's part of our culture.

A Boy in Silicon Valley • by Michael Swaine • The former orchard land of the Santa Clara Valley was undergoing a transformation...

COLUMNS

Swaine's World • by Michael Swaine • Skip the things you have already computed.

Technically Awake • by Russ Olsen • Everything Russ knows about debugging software he learned from watching his dad tinker with clock radios and coffee makers.

New Manager's Playbook • by Marcus Blankenship • All generalizations are wrong (even this one). Generalizations about people are harmful.

Shady Illuminations • by John Shade • John continues his search for intelligent life in the universe.

BOOKS

Antonio on Books • by Antonio Cangiano • *Learning GraphQL: Declarative Data Fetching for Modern Web Apps*. Plus 29 other new tech books.

From The Pragmatic Bookshelf • Open Source licensing explained, plus the top sellers and author events from The Pragmatic Bookshelf.

Plus: **On Tap** • **The PragPub Puzzle** • **The BoB Page**



Planning Your Tech Book • by Brian MacDonald • You've got a great book idea? Congratulations! The idea is where you start in writing a book. And the next step is writing, right? Not so fast. There are a few crucial steps in developing that idea into the germ of a publishable book.

Multi-Factor Authentication • by Aaron Bedra • You need to know how to implement MFA. Aaron will show you how.

The MITS Altair 8800 • by Michael Swaine • Mike recounts the events leading up to and following the release of the MITS Altair 8800.



COLUMNS

Swaine's World • by Michael Swaine • A month, briefly noted.

Technically Awake • by Russ Olsen • Stories are one of the key ways that we make sense of the world.

New Manager's Playbook • by Marcus Blankenship • Working remotely can mean different things, and some of those things may not work for you.

Shady Illuminations • by John Shade • The easy bigotry of artificial intelligence.

BOOKS

Antonio on Books • by Antonio Cangiano • Why smart engineers write bad code. Plus 29 other new tech books.

From The Pragmatic Bookshelf • *Small, Sharp, Software Tools*, plus the top sellers and author events from The Pragmatic Bookshelf.

Plus: **On Tap** • **The PragPub Puzzle** • **The BoB Page**

Beyond Passwords • by Troy Hunt • Troy explains Two-Factor Authentication and Google's Advanced Protection Program.

There's Only One Everything ... Or Is There? • by Erin Dees • Erin explores the counterintuitive properties of the infinite.

The Big Boys Move In • by Michael Swaine • In this latest installment in his computer history series, Mike discusses the IBM PC, CP/M, and the reaction of the hobbyist community to the arrival of the Big Boys.

COLUMNS

Swaine's World • by Michael Swaine • The year recalled.

Technically Awake • by Russ Olsen • Life is complicated — but programming has a trick for putting complications in their place.

New Manager's Playbook • by Marcus Blankenship • Your team has you figured out — or so they think. Do you know what their theory of you is?

Shady Illuminations • by John Shade • Richard Feynman had the right idea.

BOOKS

Antonio on Books • by Antonio Cangiano • Refactoring, refactored. Plus 29 other new tech books.

From The Pragmatic Bookshelf • News from The Pragmatic Bookshelf.

Plus: **On Tap** • **The PragPub Puzzle** • **The BoB Page**

