

Improving Faculty Recruiting in the Computing Community

Snowbird 2018 Panel

Co-Chairs: Shashi Shekhar & Josep Torrellas

Acknowledgements:

CRA: Ellen Zegura, Andrew Bernat, Mario Nascimento. Vivek Sarkar, ...

CRA-W: Nancy Amato, Kathryn McKinley, Jamie Teevan

AAAS: Allison Pritchard

Background

- **Faculty recruiting challenges**
 - Departmental leadership (e.g., **low yield**),
 - Faculty members (e.g., **multiple candidates per week**)
 - Candidates (e.g., **many strong candidates not getting academic interviews**)
- **Goals**
 - **Inform:** CRA First Step: CV Online initiative
 - **Discuss:**
 - Understand faculty recruiting challenges faced by community
 - Assess needs, if any, for additional community action

Panel Questions

- Is there a need for community action? what is it?
 - Recruiting meeting at Snowbird or the FCRC
 - Best practices paper for departments: when to make offers and fuses
 - Changes to the timelines of offers and responses
 - Guidance to faculty candidates
- What is working well and not working?

Panelists

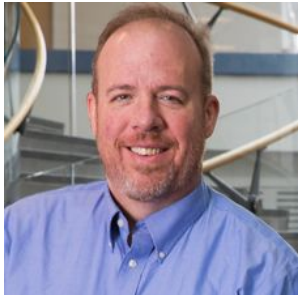


- Michael Franklin, University of Chicago

- Juan Gilbert, University of Florida



- Brian Noble, University of Michigan



- Jennifer Rexford, Princeton University



- Craig Wills, Worcester Polytechnic Institute



Resources

- One-sheet (2-page) handout [[PDF](#)] [[Word](#)]
- [Information on the CRA CV Database](#)
- [2018 Computer Science Tenure-Track Faculty Hiring Outcomes](#), C. Willis, CR News, 2018.
- [Articles Addressing Shortage of CS Professors Across Many Institutions](#), B. Bizot, CRA Bulletin, May 9th, 2018.
- [Are Ph.D. Students Losing Interest in Faculty Positions at Research Universities?](#), B. Tamer, Computing Research News, 30(1), January 2018.
- [Using Targeted Conferences to Recruit Women into Computer Science](#), C. Alvarado and E. Judson, Communications of the ACM, 57(3): 70-77, March 2014.
- [Faculty Recruitment Conference – Association of American Law Schools](#), <https://www.aals.org/services/faculty-recruitment-services/faculty-recruitment-conference/>
- [The Job Market for New Economists: A Market Design Perspective](#), P. Coles et al., Jr. of Economic Perspectives, 24(4):187-206, Fall 2010.
- [Academic Placement Career Fair – American Marketing Association](#)
- The right match: [America's biggest economic conference doubles as a jobs fair](#), The Economist, Jan 7th 2016.
- [National Resident Matching Program.](#)
- D. Perlmutter, [Don't Kill the Conference Interview](#), Chronicle of Higher Education, January 20, 2015.

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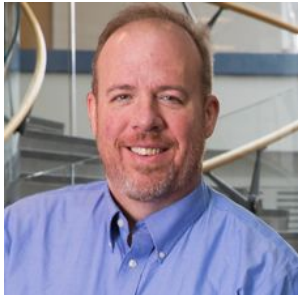


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Michael Franklin, University of Chicago

- Like many places, we are on an ambitious growth plan
 - Goal: Grow Tenured and TT faculty from ~20 to ~40 FTE
 - Expand into new areas – especially Data Science (and now AI/ML)
 - Expand professional & joint masters programs (w/B School, Public Policy, Social Sc., ...)
- We've hired 9 T/TT faculty over the past 2 years
 - Plan to continue at this pace for the next few years at least
- Major effort: >20 2-day candidate visits per season
 - Season starts early (invitations start going out 1st week of Jan – late!)
 - The “closing” process (2nd visits, etc.) has been going longer
 - Finding the right candidates is difficult (esp. diversity and inclusion)
 - When focused on growing an area – huge load on that faculty group

Some Possible Solutions

- Proper etiquette for candidates
 - How many interviews to accept?
 - It's good to cancel an interview at a place you know you won't go
- Proper etiquette for departments
 - How many candidates to invite?
 - With multiple offers to give, why wait until the very end of the season?
 - When to tell people that they aren't getting an offer
- Would making more information available help?
 - CV databases
 - Posting lists of invitees more obviously
- Retention is the other side of the coin
 - How to ensure that the opportunities we are offering are rewarding

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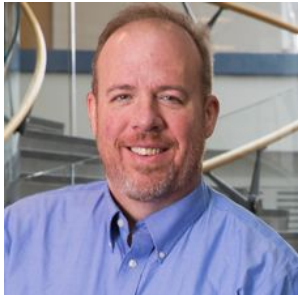


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Juan E. Gilbert, Ph.D.
University of Florida

**Improving Faculty Recruiting in
the Computing Community Panel**

UF CISE Growth

- Grown from ~37 to 55 faculty in 5 years
 - 46 TT, 9 TF (Provost and Dean appropriated funds for TF)
 - Herbert Wertheim donation; Rankings
 - 15 Full professors, 17 Associates, 14 Assistants
- Preeminence Initiative, Teacher-Scholars and Wertheim Transformation
 - Adding more faculty and lecturers
 - HWCOE will reach 300+ total faculty (Currently, 260 or so)

Challenges in Recruiting

- Assistant vs. Senior Faculty
 - We wanted a mix
- Fatigue in interviewing multiple candidates, sometimes within the same week
- Everyone hiring in CS; therefore, top candidates have many offers
 - We tend to interview the same people from the same places
- Hiring season seems to be getting longer in order to fill faculty lines

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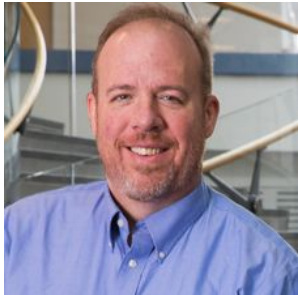


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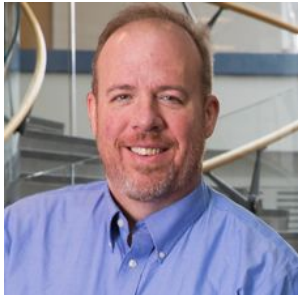


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Scaling the Recruiting Process

- Reviewing applications
 - Priority areas + other + EEO
 - Faculty divided over the priority areas to help review
 - Soft “quota” on interviews by area/other
- Interviewing candidates
 - One-day interview, with talk over lunch
 - Faculty responsible to attend and meet by area
 - Talks recorded and posted online
- Deciding on offers
 - Recruiting committee makes initial recommendations
 - Collecting views ahead of faculty meeting
 - Two notions of “abstain” (“lack of info” or “uncertain”)
 - Discuss and straw vote one week, finalize vote the next

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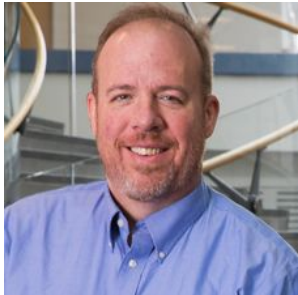


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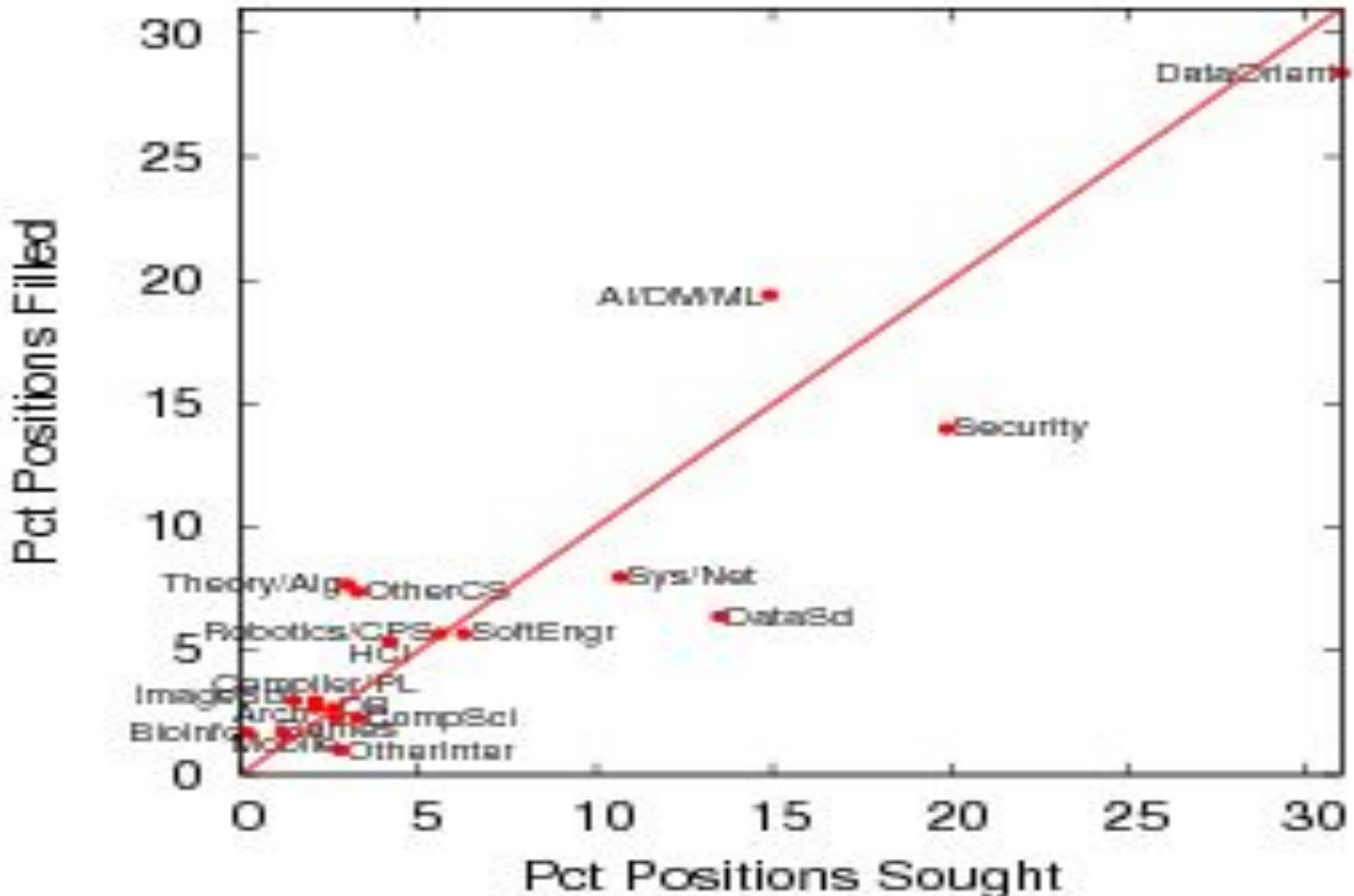


Outcomes of Advertised Computer Sc. Faculty Searches for 2018

Craig Wills, Worcester Polytechnic Institute

- 176 institutions reported filling 269 of 363 sought positions (74%)
- 22% of institutions reported failed searches, 54% at least successful
- 62% of public PhD and 58% of private PhD at least successful
- Reasons given why institutions were less than successful included a reduced number of qualified applicants, lack of partner accommodation, higher than expected salary requests, increased competition for available candidates, and particularly competitive areas such as machine learning and security.
- 29% of hired faculty start with a newly-earned PhD, 27% were previously in a tenured or tenure-track position at another institution and 23% were previously in a post-doc/researcher position

Percentages of Areas Sought vs. Areas Filled for All Institutions



Above the diagonal: a higher percentage of positions were filled than were sought.
Below the diagonal: a higher percentage of positions sought than reported filled.