Call For Partners: Romance with Rigor

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1 Introduction

Traditional dating sites are based on simple premise: participants are capable of identifying, with a reasonable degree of accuracy, which of their proposed matches are appropriate for them. Millions of years of empirical dating evidence show this premise to be false. As in all human pursuits, the dating field is rife with biases and irrational judgements, such as "You're too ugly", "you don't make enough money", and "at least he can remember my birthday, Brandon." While no system can completely eliminate human biases, the scientific community has, by and large, done an impeccable job of minimizing the influence of bias through its system of *peer review*. Even in non-blind review, simply entrusting the review process to a disinterested third party with no conflicts of interest greatly increases the quality of the outcome. If only the same could be said for love.

Unlike all other dating sites, `callfor.partners` addresses the *underlying* problem in online dating: lack of rigor. We do so by applying that most successful of human inventions, peer review. As with academic peer review, not all decisions are made by peers. Just like you get to choose what paper to submit, **YOU** are in charge of who you want to date, by writing your own personal **CALL FOR PARTNERS** and **YOU** get to make the best impression by submitting your own **PARTNERSHIP ABSTRACTS**. Only the messiest, most error-prone part is spread between peers: Deciding which partnerships to pursue and which to reject. The part that nobody wanted to do anyway.

2 Design

The central feature of the Call For Partners Partnering Workflow is the *Partnering Committee*. As with the peer review process, one selects a group of one's closest friends to make decisions as to which advances should be accepted or rejected. Usually (but not always) the reviewing process is mutual: users are motivated to join their friends' partnering committees for the reviewing services they themselves receive in return. The standard dating website trope of "profiles" appears in Call For Partners under the guise of Calls For Partners. The distinguishing feature of a CFP vs. the traditional profile is that unlike a traditional profile, a CFP is all about what **YOU** want, specifying in utmost precision the desired features in a partner. CFPs come in multiple styles. For example, a *Journal CFP* often has a rolling deadline or no deadline at all, where potential

partners are encouraged to submit at whatever time they find convenient. In contrast, a *Conference CFP* generally has a strict deadline which is extended only after a disappointingly small number of submissions. The Conference CFP is especially useful for implementing *rebound relationships*, a implemented on many sites, but never before with such rigor.

The CFP model acknowledges that you are TALENTED, and your history will speak for itself. In addition to a CFP, every participant has a CV listing relevant accomplishments. Because we are living in the future, Call For Partners applies advanced AI technology known as "Facebook Stalking" to automatically generate large portions of a CV. This open-access model (with a level of openness exceeding many leading-edge academic organizations including SIGPLAN) reduces harrassment and other abuses of the system, because participants are held accountable for their behavior in public. Remember, boys: **Before you do something you'll regret, DBLP don't forget**.

Given a CFP and CV, particpants have all the information necessary to write a Partnership Abstract. A partnership abstract gives a brief, concise description of the contents of the proposed relationship. The Partnership Committee compares the abstracts against each author's CV and own CFP, and uses this to write reviews, ranking each abstract and/or each individual's self-worth on a scale of A-F. In most cases, the reviews are clear enough that the PC can reach an anonymous conclusion as to whether the abstract should be accepted or not. In the case of a dispute, a PC Chair can be appointed with tie-breaking authority.

Upon acceptance, the relevant parties gain the ability to message each other Often, the author of the CFP will request revisions from the author of the Partnership Abstract before starting the Parternship. While the proposer does not have the ability to reject the proposee nor request changes of them, it is traditional to disclose further results publicly, which over time has a significant affect on the proposee's Impact Factor.

As with most dating sites, CFP provides funcitonality to help you search through potential matches into to identify someone to whom you wish to submit a Partnership Abstract. In addition to the barebones necessities like salary, race, and number of previous partners, CFP allows you to perform custom searches that solve the problems specific to academic communities. In fact, we provide the first known solution to the Two-Body Problem, a generalization of the Three-Body Problem initially posed by Newton.

The Two-Body Problem was originally phrased by Newton is stated as follows: **Given two bodies A and B each with an attraction and a PhD, find a place of residency and a salary.**

The key issue here, of course, is to identify a salary for two PhD's at the same time, as only so many employers are willing to employ the unemployable. In offline dating, it has been widely recognized that the problem becomes significantly easier as the distance in thesis topics increases. Thus, the Two-Body problem can be reduced to the Some-Body Problem as posed by Mercury: **Can anybody find me somebody to love? Who has a PhD in a technical field, but preferably not CS and definitely not formal methods, oh**

god please not formal methods?

At this point, the astute reader will notice that this problem is amenable to solution via an adequate search feature. The first-of-its-kind CFP Field Search allows one to specify the exact desired distance between their mate's work and their own, using traditional metrics such as Er'os Numbers, Bacon Numbers, Erdos-Bacon Numbers, and also less traditional metrics. In our companion paper, we have verified our solution to the Two-Body Problem using Mercury's Reduction.

3 Implementation

Call For Partners is currently available to the public as an open beta at `callfor.partners`. Call For Partners is implemented with Scala, Slick, Play, PostgreSQL, Heroku and assorted other buzzwords.

At present the implementation is limited, with the primary limitation being one known as "grad school", specifically, "actual work". However, and especially due to the subject matter, the implementation process has been utterly free of the other canonical time limitation known as "girlfriends," which the author credits with the implementation progress made so far.

Producing a robust, production-ready implementation of an application like CFP requires many things. The most important requirement from a business perspective is the ability to rapidly acquire, and potentially disseminate to St. Petersburg, a wide variety of sensitive personal information on customers. In this critical area, we already accell, through a robust account application process. Our application process is based on well-established social engineering techniques that lull a user into a false sense of security before we go in for the kill. For example we ask them common questions such as their Social Security Number and mother's maiden name before getting them to divulge information that many users find sensitive, such as their thesis topic.

Common wisdom in the software industry is that a successful web application also needs "features". One contribution of our work is to refute the above, phony claim. Websites like Match.com and eHarmony.com have implemented almost all the features shown in their business proposals and an even more astonishing fraction of features featured in their advertising materials. CFP, being authored by the expeditious academics that it is, has more or less elided this step, yet derived an equal number of publications.

4 Evaluation

An early version of callfor.partners was tested on select attendees of SIBOVIK 2016 in a private beta for the past year. In retrospect, this choice of test users presented a huge logistical problem: In large part due to their collective scientific prowess, the average attendee of SIGBOVIK 2016 had at the start of our trial 2.3 girlfriends, 6 boyfriends, 1.9 wives, 4 husbands, 24 desperate exes trying to

get back together with them and the occasional 1.5 Texas. In order to keep the evaluation simple, all such relationships were terminated at the start of the study, the last of them much to the chagrin of James K. Polk. This in fact interfered significantly with the validity of our study by sending a vast tidal wave of fresh singles throughout the surrounding community. However, keeping with the long-held standards of the scientific community, we will publish the study anyway.

Our experimental evaluation sought to answer the following questions:

- How does CFP affect the overall number of people dating in a population? We call this the *mojo quotient*.
- How does CFP affect the romantic success of individuals within the population? We call this the *love-potion factor*.
- How effective is CFP at enabling the treatment group to restore itself to its equilibrium quantity of relationships when the equilibrium is disturbed? We call this the *rebound factor*.

A treatment group of 125 attendees was provided with an experimental prerelease version of CFP. A control group of 75 attendees was provided with industry-standard dating software. Out of the control group, only 15 participants made it to the end of the trial. Out of the remaining 60, 40 quit the trial early due to the despicable dating options available to them, 18 died of loneliness and two of them decided to date each other as an excuse to stop talking to hot singles in their area. By the end of the trial, the treatment group had reached a size of 500, for the participants had produced on average 3 offspring, with the remaining 25 additions consisting of a mixture of immaculate conceptions, Russian hackers, and Peruvian drug kingpins bribing their way into the trial.

We initially proposed that the mojo quotient be computed as the fraction of an overall population engaged in a romantic relationship, but this had two failings:

- The structure of the population changed vastly over the course of the study due to widespread procreation.
- By the end of the study, each participant had an average of 550 relationships, contracting common wisdom as to the value of Dunbar's Number.

The former failing was ameliorated by the fact that a large number of the resulting newborns also started dating each other. However, this result was so surprising and potentially-unethical that we felt it, too, ought to be somehow reflected in our metric.

Thus we settled on the following definition of mojo quotient:

$$Q_M = \frac{\sum_{p \in \text{Participants}} |rels(p)| \cdot c^{diapers(p)}}{|\{p | age(p) \geq 18\}|}$$

Where rels is the number relationships a participant is engaged in, age(p) is their age, diapers(p) is the average number of diapers they use in a day, and c is an experimentally determined constant set to 5 for the purposes of this study.

The love-potion factor is defined as the median ratio of number of relationships/year after/before the introduction of CFP. Naturally this metric was computed only for participants already in existence at the beginning of the study. We computed the love-potion factor to be exactly 3, no more, no less, whereas the control group had a love-potion factor of 0.4. This factor was arguably not too meaningful given the large number of deserters.

The unique structure of this study greatly simplified our calculation of the rebound factor, because all participants were artificially reduced to 0 relationships at the onset of the study. The rebound factor is computed by calculating the time it takes for both the treatment group and control group tor reach their initial fraction of romantically active participants, then taking the ratio between the two groups. Unfortunately, the control group never reached its initial fraction, and thus we have computed a rebound factor of ∞.

In conclusion, CFP is infiitely better than all competing options.

5 Testimonials

As if the cold, hard, numbers from the previous section were not enough, we have also obtained a series of testimonial comments from participants in our study. While testimonials lack the rigorous proof of superiority that we already provided above, they aid us in the analysis of subjective aspects of the work, such as *why* we are the superior dating service.

> Initially, I was skeptical about entrusting all my personal information to a website that encrypted my communications with a Vic cypher, and whose idea of a salted hash was cannabis with a dash of sodium chloride, but the minute Anastassia SQL-injected her way into my financial records, she injected herself into my heart! Nothing spells true love quite like breaking past a firewall, compromising private records and selling my credit card to the Russian mafia. We've been together for months now and we really just click. — Ryan Kavanagh

> Before I used CFP, I was in, like, one relationship, tops. Now I'm in so many relationships I think the US Navy is jealous of just how often I am shipped. — Stefan Muller

6 Related Work

Many websites have addressed the related work of dating, though the author strongly suggest that you do not date your relatives for it is bad for the gene pool. Websites such as eHarmony are based on the pseudo-science of compatibility. Anyone who has ever tried to open a Word 2016 in Word 95 knows that most

things we say are compatible, are not, and thus it is with humans. OkCupid appeals to paganistic rituals in the hopes of receiving optimal pairings from the divines, who, unfortunately, do not believe in computers. Match.com and Tinder both determine optimal dates by lighting large groups of singles on fire and seeing which ones burn to the ground. Those which do not burn are witches and thus not good dating material, but unfortunately by that point all the good ones are dead, making the method ineffective in practice.

7 Promotional Offers

Most scientific papers offer you so-called "knowledge" for "free", where "free" means you already belong to an institution which has already paid an exhorbinant fee in order to access the publication, or perhaps you have located the author's so-called "web-site". At CFP, we believe in doing things differently. This article has already provided you with free knowledge, free not only as in beer but as in speech, and now we are going to provide you with even more freedom like the good patriotic Americans that we are.

Typically, like all profitable businesses, CFP does not come for free. It can be paid for in several different ways, including not only the typical monthly subscription models, but also more academic-friendly methods such as co-author status on your publications or NSF grant funding (after extensive lobbying of the NSF Computer Science Directorate, acquisition of life partners is now considered a billable research expense). Since you, dear reader, have gotten in early by reading our very first publication, you can try CFP for a limited time, free-of-cost. This year's SIGBOVIK 2017 proceedings come with an included 6-month membership to CFP (this was totally not a bribe in order to get the present article published), which can be extended to at least 2 years via our affiliate program: every friend or lover you recommend to CFP (to the paid service, of course) will extend your membership by 1 month.

Now how's THAT for some science?

8 Conclusion

In this paper, we have presented Call For Partners, an online dating service based on academic peer-review. Call For Partners uses the rigor of peer-review to reduce the number of dating errors due to human bias. An implementation is provided using the Inter-Net, by which users can try out the proposed dating methods for themselves and significantly increase the author's material wealth. An empirical study shows that not only does CFP significantly reduce the number of errors, but it drastically increases the amount of dating at the same time. Not only are the results of our empirical study significant, but a promotional offer is given whose savings are significant as well.