

EXHIBIT 16

**REDACTED VERSION OF DOCUMENT(S)
SOUGHT TO BE SEALED**

EXHIBIT EE

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
OAKLAND DIVISION

MATTHEW CAMPBELL,) Case No.
MICHAEL HURLEY, and) C 13-05996 PJH (MEJ)
DAVID SHADPOUR)
Plaintiffs)
vs.)
FACEBOOK, INC.)
Defendants)

HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY

Videotaped Deposition of Jennifer Golbeck
Washington, D.C.
December 16, 2015
9:03 a.m.

Reported by: Bonnie L. Russo
Job No. 2196773

PAGES 1 - 357

1 you looking at or opining on?

2 A. So I looked at two versions of this
3 guy's -- the fraudulent guy's Web sites -- he
4 had two Web sites -- and basically just said
5 the name of Equity Trust Company didn't appear
6 on those Web sites.

7 Q. When you refer to the Internet
8 archive, is that the same as the Wayback
9 Machine?

10 A. It is.

11 Q. Okay. Is that something you rely
12 upon in -- in your work?

13 A. Pretty -- I use it pretty
14 frequently.

15 Q. Is it pretty -- do you find it to be
16 fairly reliable?

17 A. It's -- yeah, for what it is, right?
18 It's definitely not a complete archive of
19 everything that's out there, but the copies of
20 things that they do have are accurate.

21 And -- and I -- this is, again,
22 totally outside the area of my expertise
23 legally, but I think -- my understanding is
24 that they actually have said that legally it
25 can be assumed as true that, if something was

1 archived on March 1st, that that absolutely was
2 there on March 1st. So it seems reliable to me
3 in that way.

4 Q. Other than the expert reports and
5 testimony we've talked about, is there any
6 other -- are there any other expert reports or
7 testimony that you've ever given?

8 A. No. There are other cases that I've
9 been invited to participate in, especially
10 patent cases, but ones that I've declined.

11 Q. Have you ever served as a
12 nontestifying consultant in a -- in a lawsuit?

13 A. So those --

14 Q. Other than the E. Stephanie and --
15 you'll have to remind me of the name of the
16 other one.

17 A. Yeah. Sherry's Dance Studio, I --

18 Q. Sherry's Dance Studio.

19 A. -- I think --

20 Q. Yeah.

21 A. -- is what that was.

22 Those I would count in there. Other
23 than those, I don't -- I don't think so.

24 Q. If you -- in the instances when
25 you've declined to work in a patent case, why

1 A. Yes.

2 Q. Have you observed people with
3 differing degrees of knowledge -- and here I'm
4 talking about social network users -- regarding
5 sort of the collection and processing of their
6 data by the social network?

7 A. Yeah. There's vastly different
8 understandings.

9 Q. Why do you think that is?

10 A. It's really complicated, you know.
11 It -- and I think it's hard even for people who
12 are trained in that space to -- to really
13 understand what's happening because its
14 relatively opaque.

15 I have been surprised at times on --
16 on what data is made available say to third
17 parties. And I spend all my time learning
18 about that, right?

19 Q. Uh-huh.

20 A. That -- kind of how data gets out.
21 So I say in a lot of these talks, like if I
22 didn't know, like literally no one on earth can
23 be expected to know because it's my full-time
24 job, and I'm one of the experts on it.

25 So, you know, it's complicated. And

1 then there's people with varying degrees of how
2 interested they are in tracking this down --

3 Q. Uh-huh.

4 A. -- right? I think it's analogous to
5 like terms of service, right? I read them.
6 Most people don't. And, you know, that's --
7 that gives you a big difference in what you
8 understand.

9 Q. Would you agree with me that some
10 people understand that, when they are
11 interacting with a -- with a Web site, that
12 there are various electronic processes
13 happening in order to render the site and, you
14 know, basically make the site run, some people
15 are sort of aware of that, and others don't
16 have a clue?

17 MR. RUDOLPH: Objection. Form.
18 Vague. Compound.

19 THE WITNESS: I think that's true,
20 that there's varying levels of understanding
21 that people have on how that works.

22 BY MR. JESSEN:

23 Q. Have you observed differing degrees
24 of consent from users for collection and use of
25 their data?

1 general is -- I find it's much more difficult
2 to use.

3 There are certainly more people with
4 public profiles on Facebook, but it's a lot
5 harder to find them in the way they can be
6 found on Twitter or Pinterest, for example.

7 Q. Okay. So tell me briefly what the
8 thesis was of the -- of the TED talk.

9 A. Oh. I've never thought of it that
10 way.

11 Q. Or maybe not -- "thesis" is the
12 wrong word, but the -- the point you were
13 making.

14 A. I think -- you know, talking about
15 what people know and what they don't, hardly
16 anyone who hasn't seen my TED talk knows that
17 these kind of person- -- private personal
18 attributes can be inferred about them from what
19 they're doing online.

20 And the purpose of the TED talk was
21 really to kind of explain the vary powerful
22 things that we can do with this technology and
23 get people thinking about the implications.

24 Q. And one of the things, I think --
25 you know, forgive me if I'm getting this

1 wrong -- but you discuss with homophily?

2 A. Yes. You got it right.

3 Q. What is -- what -- you may have to
4 give the court reporter the spelling of that
5 one.

6 But what is -- what is that exactly?

7 A. Yeah. So homophily,
8 H-O-M-O-P-H-I-L-Y, is a concept from sociology
9 actually that basically birds of a feather flock
10 together, that we tend to be friends with
11 people who share our traits more than people
12 randomly pulled from the general population
13 would share our traits.

14 So you're right; you're friends with
15 rich people. If you're poorly educated, your
16 friends tend to be poorly educated. It applies
17 to race, sexual orientation, income, education,
18 kind of across the board.

19 Not that all of your friends are
20 like that, but your traits are more common in
21 your friends than they are in the general
22 population.

23 Q. And does this -- is this sort of --
24 is this the phenomenon that allows a researcher
25 like yourself to look at seemingly random data,

1 like what kind of fries you like, and then make
2 some sort of -- and I'm phrasing this really
3 badly -- but draw an inference about it based
4 upon attributes that you wouldn't think would
5 correlate with that?

6 A. Sometimes.

7 Q. Not a good question.

8 A. So in the curly fries example in the
9 talk, which you were just talking about --

10 Q. Yeah.

11 A. -- you know, I kind of hypothesize
12 that homophily was one of the things that play
13 there. Sometimes it's used very directly in
14 those algorithms --

15 Q. Uh-huh.

16 A. -- where they're relying on that
17 basically as the entirety. I think it plays a
18 role in a lot of those algorithms, though
19 sometimes it's much less explicit.

20 Q. Is homophily at all relevant to the
21 organization of social networks?

22 A. In -- so are you asking could a
23 social network organize around that principle,
24 or does it emerge in social networks?

25 Q. I guess more the latter.

1 A. I think it's true. I mean the
2 principle says these are the kinds of people we
3 tend to choose as friends, right? If I'm a
4 liberal, I will tend to choose other liberal
5 people as my friends.

6 And so, in that case, it can
7 influence how a social network forms. If I
8 find out some guy is a ranging racist, I may
9 unfriend him on Facebook, and that affects the
10 network.

11 So that -- that could be a way
12 homophily is considered, its play in
13 influencing the structure of the network.

14 Q. Earlier you talked about social
15 graph.

16 Remind me what you meant by that?

17 A. Social graph is just a -- a term to
18 refer to people and their connections to one
19 another.

20 Q. And generally how is the data in a
21 social graph organized?

22 A. Like from a computing perspective or
23 from a mathematical perspective?

24 Q. I think a computing perspective.

25 A. So there it really depends. So from

1 the mathematical perspective, it tends to be
2 represented in a graph structure, which is a
3 mathematical concept --

4 Q. Okay.

5 A. -- and to tease into their
6 connections to one another.

7 Q. Uh-huh.

8 A. Com- -- computationally, you could
9 store that in a relational database. There's
10 also graph-based databases that -- that are
11 network-based instead of relational. So it
12 really depends on the implementation.

13 Q. Uh-huh. Do you know if Facebook has
14 a social graph?

15 A. I mean they certainly have people
16 connected to other people.

17 Q. Uh-huh. And is that something -- do
18 you know if there are other things that go into
19 their social graph?

20 A. Well, I would just want to be
21 careful about terminology here, because
22 Facebook has a thing that they call "the social
23 graph" --

24 Q. Right.

25 A. -- which is different from the kind

1 of generic way I'm using the term.

2 Q. Okay.

3 [REDACTED]

4 [REDACTED]

5 [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED]

21 [REDACTED]

22 [REDACTED]

23 [REDACTED]

24 [REDACTED]

25 [REDACTED]

1 [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
2 [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
3 [REDACTED] [REDACTED]
4 [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
5 [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
6 [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

7 MR. JESSEN: Okay. I don't have any
8 further questions at this time.

9 I would renew my request for those
10 three e-mails between Dr. Golbeck and the
11 plaintiffs' counsel before she was engaged.

12 MR. RUDOLPH: We're -- we're going
13 to have to get back to you on that.

14 MR. JESSEN: Okay. And I'll just --

15 MR. RUDOLPH: Haven't had have time
16 to -- to look into it.

17 MR. JESSEN: Even though I think
18 it's unlikely I would bring you back, I will
19 just reserve my right to bring you back if need
20 be.

21 THE WITNESS: For the 15 seconds
22 that we have left on the record. That'd be
23 fun.

24 MR. JESSEN: They might --

25 THE WITNESS: I'll totally do 15

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

CERTIFICATE OF NOTARY PUBLIC

I, Bonnie L. Russo, the officer before whom the foregoing deposition was taken, do hereby certify that the witness whose testimony appears in the foregoing deposition was duly sworn by me; that the testimony of said witness was taken by me in shorthand and thereafter reduced to computerized transcription under my direction; that said deposition is a true record of the testimony given by said witness; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this deposition was taken; and further, that I am not a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of the action.



Notary Public in and for
the District of Columbia

My Commission expires: June 30, 2020