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SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

SCHEDULE 13G  
(RULE 13d - 102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO 13d-1(b), (c) AND (d) AND AMENDMENTS THERETO FILED  
PURSUANT TO 13d-2

(Amendment No. ) \*

Invitae Corporation  
(Name of Issuer)

Common Stock, \$0.0001 par value per share  
(Title of Class of Securities)

46185L103  
(CUSIP Number)

December 31, 2018  
(Date of Event which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)  
 Rule 13d-1(c)  
 Rule 13d-1(d)

\*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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CUSIP No. 46185L103

1	NAME OF REPORTING PERSON  Gilder, Gagnon, Howe & Co. LLC	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP  (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION  New York	
<b>NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH</b>	5	SOLE VOTING POWER  58,298
	6	SHARED VOTING POWER  0
	7	SOLE DISPOSITIVE POWER  58,298
	8	SHARED DISPOSITIVE POWER  4,930,921
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  4,989,219	
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES  <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  6.69%	
12	TYPE OF REPORTING PERSON  BD	

**ITEM 1(a). Name of Issuer:**

Invitae Corporation

**Item 1(b). Address of Issuer's Principal Executive Offices:**

1400 16<sup>th</sup> Street  
San Francisco, CA 94103

**Item 2(a). Name of Persons Filing:**

Gilder, Gagnon, Howe & Co. LLC

**Item 2(b). Address of Principal Business Office or, if None, Residence:**

475 10th Avenue  
New York, NY 10018

**Item 2(c). Citizenship:**

New York

**Item 2(d). Title of Class of Securities**

Common Stock

**Item 2(e). CUSIP Number:**

46185L103

**ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO RULE 13d-1(b), OR 13d-2(b) OR (c), CHECK WHETHER THE PERSON FILING IS A:**

- (a)  Broker or dealer registered under Section 15 of the Act (15 U.S.C. 78o)
  - (b)  Bank as defined in Section 3(a)(6) of the Act (15 U.S.C. 78c).
  - (c)  Insurance company defined in Section 3(a)(19) of the Act (15 U.S.C. 78c).
  - (d)  Investment company registered under Section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8).
  - (e)  An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E).
  - (f)  An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F).
  - (g)  A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G).
  - (h)  A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813).
  - (i)  A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
  - (j)  A non-U.S. institution in accordance with §240.13d-1(b)(1)(ii)(J)
  - (k)  Group, in accordance with Rule 13d-1(b)(1)(ii)(K).
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**Item 4. Ownership.**

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

- (a) Amount beneficially owned: 4,989,219
- (b) Percent of class: 6.69%
- (c) Number of shares of Common Stock as to which such person has:
  - (i) Sole power to vote or direct the vote: 58,298
  - (ii) Shared power to vote or direct the vote: 0
  - (iii) Sole power to dispose or direct the disposition: 58,298
  - (iv) Shared power to dispose or direct the disposition: 4,930,921

The shares reported include 4,716,010 shares held in customer accounts over which partners and/or employees of the Reporting Person have discretionary authority to dispose of or direct the disposition of the shares, 58,298 shares held in the account of the profit sharing plan of the Reporting Person, and 214,911 shares held in accounts owned by the partners of the Reporting Person and their families.

**Item 5. Ownership of Five Percent or Less of a Class.**

If this statement is being filed to report the fact that as of the date hereof the Reporting Persons have ceased to be the beneficial owner of more than five percent of the class of securities, check the following  .

**Item 6. Ownership of More than Five Percent on Behalf of Another Person.**

Not applicable.

**Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company.**

Not applicable.

**Item 8. Identification and Classification of Members of the Group.**

Not applicable.

**Item 9. Notice of Dissolution of Group.**

Not applicable.

**Item 10. Certification.**

By signing below the undersigned certifies that, to the best of its knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect, other than activities solely in connection with a nomination under §240.14a-11.

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**SIGNATURES**

After reasonable inquiry and to the best of the undersigned's knowledge and belief, the undersigned certifies that the information set forth in this statement is true, complete and correct.

Dated: February 13, 2019

GILDER, GAGNON, HOWE & CO. LLC

By: /s/ Bonnie Haupt

Name: Bonnie Haupt

Title: Chief Compliance Officer & Branch Manager

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