
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934

BigBear.ai Holdings, Inc.
(Name of Issuer)

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

08975B109
(CUSIP Number)

BBAI Ultimate Holdings, LLC
2500 N. Military Trail,
Suite 470
Boca Raton, Florida 33431
Attention: Melissa Klafter
(561) 372-7820

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

with a copy to:

Timothy Cruickshank, P.C.
Kirkland & Ellis LLP
601 Lexington Avenue
New York, New York 10022
(212) 446-4800

December 7, 2021
(Date of Event Which Requires Filing of This Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

Note. Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.

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).

1	Names of reporting persons BBAI Ultimate Holdings, LLC	
2	Check the appropriate box if a member of a group (see instructions) (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC use only	
4	Source of funds (see instructions) OO	
5	Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6	Citizenship or place of organization Delaware	
Number of shares beneficially owned by each reporting person with	7	Sole voting power 0
	8	Shared voting power 105,000,000
	9	Sole dispositive power 0
	10	Shared dispositive power 105,000,000
11	Aggregate amount beneficially owned by each reporting person 105,000,000	
12	Check box if the aggregate amount in Row (11) excludes certain shares (see instructions) <input type="checkbox"/>	
13	Percent of class represented by amount in Row (11) 77.5%(1)	
14	Type of reporting person (see instructions) OO	

- (1) Calculation is based upon 135,566,227 shares of Common Stock of the Issuer issued and outstanding as of the closing of the Issuer's business combination reported on the Issuer's Form 8-K filed with the Securities and Exchange Commission on December 13, 2021.

1	Names of reporting persons AE BBAI Aggregator, LP	
2	Check the appropriate box if a member of a group (see instructions) (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC use only	
4	Source of funds (see instructions) OO	
5	Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6	Citizenship or place of organization Delaware	
Number of shares beneficially owned by each reporting person with	7	Sole voting power 0
	8	Shared voting power 113,250,000
	9	Sole dispositive power 0
	10	Shared dispositive power 113,250,000
11	Aggregate amount beneficially owned by each reporting person 113,250,000	
12	Check box if the aggregate amount in Row (11) excludes certain shares (see instructions) <input type="checkbox"/>	
13	Percent of class represented by amount in Row (11) 83.5%(1)	
14	Type of reporting person (see instructions) PN	

- (1) Calculation is based upon 135,566,227 shares of Common Stock of the Issuer issued and outstanding as of the closing of the Issuer's business combination reported on the Issuer's Form 8-K filed with the Securities and Exchange Commission on December 13, 2021.

1	Names of reporting persons Michael R. Greene	
2	Check the appropriate box if a member of a group (see instructions) (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC use only	
4	Source of funds (see instructions) OO	
5	Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6	Citizenship or place of organization Delaware	
Number of shares beneficially owned by each reporting person with	7	Sole voting power 0
	8	Shared voting power 113,250,000
	9	Sole dispositive power 0
	10	Shared dispositive power 113,250,000
11	Aggregate amount beneficially owned by each reporting person 113,250,000	
12	Check box if the aggregate amount in Row (11) excludes certain shares (see instructions) <input type="checkbox"/>	
13	Percent of class represented by amount in Row (11) 83.5%(1)	
14	Type of reporting person (see instructions) IN	

- (1) Calculation is based upon 135,566,227 shares of Common Stock of the Issuer issued and outstanding as of the closing of the Issuer's business combination reported on the Issuer's Form 8-K filed with the Securities and Exchange Commission on December 13, 2021.

1	Names of reporting persons David H. Rowe	
2	Check the appropriate box if a member of a group (see instructions) (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC use only	
4	Source of funds (see instructions) OO	
5	Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6	Citizenship or place of organization Delaware	
Number of shares beneficially owned by each reporting person with	7	Sole voting power 0
	8	Shared voting power 113,250,000
	9	Sole dispositive power 0
	10	Shared dispositive power 113,250,000
11	Aggregate amount beneficially owned by each reporting person 113,250,000	
12	Check box if the aggregate amount in Row (11) excludes certain shares (see instructions) <input type="checkbox"/>	
13	Percent of class represented by amount in Row (11) 83.5%(1)	
14	Type of reporting person (see instructions) IN	

- (1) Calculation is based upon 135,566,227 shares of Common Stock of the Issuer issued and outstanding as of the closing of the Issuer's business combination reported on the Issuer's Form 8-K filed with the Securities and Exchange Commission on December 13, 2021.

1	Names of reporting persons Aeroequity GP, LLC	
2	Check the appropriate box if a member of a group (see instructions) (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC use only	
4	Source of funds (see instructions) OO	
5	Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6	Citizenship or place of organization Delaware	
Number of shares beneficially owned by each reporting person with	7	Sole voting power 0
	8	Shared voting power 113,250,000
	9	Sole dispositive power 0
	10	Shared dispositive power 113,250,000
11	Aggregate amount beneficially owned by each reporting person 113,250,000	
12	Check box if the aggregate amount in Row (11) excludes certain shares (see instructions) <input type="checkbox"/>	
13	Percent of class represented by amount in Row (11) 83.5%(1)	
14	Type of reporting person (see instructions) OO	

- (1) Calculation is based upon 135,566,227 shares of Common Stock of the Issuer issued and outstanding as of the closing of the Issuer's business combination reported on the Issuer's Form 8-K filed with the Securities and Exchange Commission on December 13, 2021.

Item 1. Security and Issuer.

The class of equity security to which this Statement on Schedule 13D relates is shares of common stock, par value \$0.0001 per share (Common Stock) of BigBear.ai Holdings, Inc. (f/k/a GigCapital4, Inc.), a Delaware corporation (the Issuer). The address of the Issuer's principal executive office is 6811 Benjamin Franklin Drive, Suite 200, Columbia, Maryland 21046.

Item 2. Identity and Background.

(a) This Statement is being jointly filed by each of the following persons pursuant to Rule 13d-1(k) promulgated by the Securities and Exchange Commission (the Commission) pursuant to Section 13 of the Securities Exchange Act of 1934, as amended (the Exchange Act): (i) BBAI Ultimate Holdings, LLC, a Delaware limited liability company (Holdings), by virtue of its direct ownership of Common Stock; (ii) AE BBAI Aggregator, LP, a Delaware limited partnership (Aggregator), by virtue of its direct ownership of Common Stock; (iii) Michael R. Greene and David H. Rowe, by virtue of them being the managing members of AeroEquity GP, LLC; and (iv) AeroEquity GP, LLC, a Delaware limited liability company (AeroEquity GP). AeroEquity GP is the general partner of AE Industrial Partners Fund II GP, LP (AE Fund II GP). AE Industrial Partners Fund II-B, LP (AE Fund II-B), AE Industrial Partners Fund II, LP (AE Fund II LP) and AE Industrial Partners Fund II-A, LP (AE Fund II-A) and, together with AE Fund II-B and AE Fund II LP, the AE Funds are the equityholders of Holdings and Aggregator. AE Fund II GP is the general partner of each of the AE Funds. AE BBRED GP, LLC, the general partner of Aggregator, is controlled by its managing members, Michael R Greene and David H. Rowe.

Each of Holdings, Aggregator, Michael R. Greene, David H. Rowe and AeroEquity GP are sometimes referred to herein individually as a Reporting Person and collectively as the Reporting Persons. Information with respect to each of the Reporting Persons is given solely by such Reporting Person, and no Reporting Person assumes responsibility for the accuracy or completeness of information by another Reporting Person.

Certain Information required by this Item 2 concerning the executive officers and directors of the Reporting Person is set forth on Schedule A attached hereto, which is incorporated herein by reference.

(b) The address of the principal business and principal office of each of the Reporting Persons is 2500 N. Military Trail, Suite 470 Boca Raton, Florida 33431.

(c) The principal business of the Reporting Persons is to make investments in other businesses.

(d) During the past five years, none of the Reporting Persons nor, to the best knowledge of such persons, any of the persons named in Schedule A, has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

(e) During the past five years, none of the Reporting Persons nor, to the best knowledge of such persons, any of the persons named in Schedule A, was a party to a civil proceeding of a judicial or administrative body of competent jurisdiction as a result of which such person was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

(f) All individuals named in Schedule A are citizens of the United States.

Item 3. Source and Amount of Funds or Other Consideration.

The responses to Item 4 and Item 6 of this Statement are incorporated herein by reference.

Item 4. Purpose of Transaction.

The information set forth in Item 6 of this Schedule 13D is hereby incorporated herein by reference.

Holdings and Aggregator are the holders of record of the Common Stock reported herein. The Reporting Persons hold the Common Stock for investment purposes. Depending on market conditions and other factors (including evaluation of the Issuer's businesses and prospects, availability of funds, alternative uses of funds and general economic conditions), the Reporting Persons may from time to time acquire additional securities of the Issuer or dispose of all or a portion of their investment in Holdings, Aggregator and/or the Issuer.

Except as set forth in the preceding paragraph and in Item 6 of this Schedule 13D, as of the date hereof, the Reporting Persons do not have any plan or proposal that relates to or would result in any of the transactions enumerated in sub items (a) through (j) of the instructions to Item 4 of this Schedule 13D.

Notwithstanding the foregoing, the Reporting Persons reserve the right to effect any such actions as any of them may deem necessary or appropriate in the future.

Item 5. Interest in Securities of the Issuer.

(a) The responses to Item 2 of this Statement are incorporated by reference herein. The following information is as of the date hereof and assumes there are 135,566,227 shares of Common Stock outstanding as of December 17, 2021, based on information furnished by the Issuer.

Holdings is the direct beneficial owner of 105,000,000 shares of Common Stock. Holdings beneficially owns 77.5% of the Common Stock outstanding as of the date of this Statement.

Aggregator is the direct beneficial owner of 8,250,000 shares of Common Stock. Aggregator beneficially owns 83.5% of the Common Stock outstanding as of the date of this Statement.

Voting and dispositive power with respect to the shares of common stock held by each of Holdings and Aggregator is exercised by Michael R. Greene and David H. Rowe.

(b) By virtue of the relationship among the Reporting Persons described in Item 2, each such Reporting Person may be deemed to share the power to vote or direct the vote and to share the power to dispose of or direct the disposition of the 113,250,000 shares of Common Stock as set forth in rows 7 through 13 of the cover pages of this Statement.

(c) Except as otherwise set forth in this Statement, none of the Reporting Persons or, to the best knowledge of such persons, the persons named in Schedule A, has effected any transactions in the Common Stock during the past 60 days.

(d) Except as stated within this Item 5, to the knowledge of the Reporting Persons, only the Reporting Persons have the right to receive or the power to direct the receipt of dividends from, or proceeds from the sale of, the Common Stock of the Issuer reported by this Statement.

(e) Inapplicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer*Merger Agreement and Related Transactions*

On December 7, 2021, (i) GigCapital4 Merger Sub Corporation, a Delaware corporation and wholly owned subsidiary of the Issuer ("Merger Sub") merged with and into BigBear.ai Holdings, LLC, a Delaware limited liability company ("BigBear"), with BigBear being the surviving entity in the merger (the "First Merger"), and (ii) BigBear merged with and into the Issuer, with the Issuer being the surviving entity in the merger (the "Second Merger" and together with the First Merger, the "Merger"), pursuant to the Agreement and Plan of Merger, dated as of June 4, 2021, by and among the Issuer, Merger Sub, BigBear, and Holdings (as amended, the "Merger Agreement"). As part of the Merger, the Issuer issued 105,000,000 shares of common stock and paid \$75,000,000 to BBAI Ultimate Holdings, LLC in exchange for units of the Issuer.

This summary is qualified in its entirety by reference to the text of the Merger Agreement, which is attached hereto as Exhibit 2 and Exhibit 3, and incorporated by reference.

Investor Rights Agreement

Holdings, Aggregator and certain of their affiliates (the “Partners”), together with the Issuer, GigAcquisitions4, LLC (the “Sponsor”), Oppenheimer & Co. Inc., Nomura Securities International, Inc., BMO Capital Markets Corp. and William Blair & Company, L.L.C., have been granted certain rights, pursuant to the Amended and Restated Investor Rights Agreement (“Investor Rights Agreement”) entered into on December 6, 2021, in connection with the execution of the Merger Agreement.

Pursuant to the Investor Rights Agreement, the Issuer’s Board of Directors (the “Board”) is comprised of eleven directors, of which (i) seven of such directors were initially designated by the Partners, (ii) three of such directors were initially designated by the Sponsor and (iii) one of such directors was initially designated mutually by the Partners and the Sponsor, as further set forth by the Investor Rights Agreement. Additionally, the Partners and the Sponsor have agreed to not to sell, transfer, pledge or otherwise dispose of shares of registrable securities for 180 days, subject to certain exceptions. In addition, pursuant to the Investor Rights Agreement the Issuer will file a shelf registration statement within 45 days following the date of the closing of business combination in respect of all registrable securities under the Investor Rights Agreement (subject to the Issuer’s receipt of certain information from the holders thereof) and will use reasonable best efforts to cause such shelf registration statement to become effective under the Securities Act of 1933, as amended, as soon as practicable after such filing and, once effective, maintain or, in the event it ceases to be effective, replace such shelf registration statement until such parties have sold all eligible equity securities of the Issuer beneficially owned by such parties as of the date of the Closing (as defined in the Investor Rights Agreement). Pursuant to the Investor Rights Agreement, certain parties will be entitled to customary piggyback rights on registered offerings of equity securities of the Issuer and certain other registration rights, including unlimited shelf take-downs and, in the case of the Partners, demand registration rights following the expiration of the Lock-Up Period (as defined in the Investor Rights Agreement). Any underwritten offering of the Issuer’s equity securities will be subject to customary cut-back provisions. Pursuant to the Investor Rights Agreement, the Issuer will agree to cooperate and use commercially reasonable efforts to consummate the applicable registered offerings initiated by the parties and will pay the fees and expenses of such offerings (including reasonable and documented fees of one counsel for the parties participating in such offering). This summary is qualified in its entirety by reference to the text of the Investor Rights Agreement, which is included as Exhibit 4 and incorporated by reference.

Item 7. Material to be Filed as Exhibits

- Exhibit 1 Joint Filing Agreement among the Reporting Persons, dated as of December 17, 2021.
- Exhibit 2 Agreement and Plan of Merger, dated as of June 4, 2021, by and among BigBear.ai Holdings, Inc. (formerly known as GigCapital4, Inc.), GigCapital4 Merger Sub Corporation, BigBear.ai Holdings, LLC and BBAI Ultimate Holdings, LLC, as amended by the Amendment to Merger Agreement, dated as of August 6, 2021 (incorporated by reference from Annex A to the Definitive Proxy Statement filed by the Issuer on November 5, 2021).
- Exhibit 3 Amendment No. 2 to Merger Agreement, dated as of November 29, 2021 (incorporated by reference to Exhibit 10.1 filed on the Issuer’s Current Report on Form 8-K, filed by the Issuer on November 30, 2021).
- Exhibit 4 Amended and Restated Investor Rights Agreement, dated December 6, 2021, by and among BigBear.ai Holdings, Inc. (formerly known as GigCapital4, Inc.), BBAI Ultimate Holdings, LLC, AE BBAI Aggregator, LP, GigAcquisitions4, LLC, Oppenheimer & Co. Inc., Nomura Securities International, Inc., BMO Capital Markets Corp., William Blair & Company, L.L.C., and Other Holders (as defined in the Amended and Restated Investor Rights Agreement) (incorporated by reference to Exhibit 10.7 filed on the Issuer’s Current Report on Form 8-K, filed by the Issuer on December 7, 2021).

SIGNATURES

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

Date: December 17, 2021

BBAI ULTIMATE HOLDINGS, LLC

By: /s/ Jeffrey Hart

Name: Jeffrey Hart

Title: Vice President and Secretary

AE BBAI AGGREGATOR, LP

By: AE BBRED GP, LLC

Its: General Partner

By: /s/ Kirk Konert

Name: Kirk Konert

Title: President

AEROEQUITY GP, LLC

By: /s/ Michael R. Greene

Name: Michael R. Greene

Title: Managing Member

By: /s/ Michael R. Greene

Name: Michael R. Greene

By: /s/ David H. Rowe

Name: David H. Rowe

SCHEDULE 13D JOINT FILING AGREEMENT

In accordance with the requirements of Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, and subject to the limitations set forth therein, the parties set forth below agree to jointly file the Schedule 13D to which this joint filing agreement is attached, and any subsequent amendments thereto, and have duly executed this joint filing agreement as of the date set forth below.

Date: December 17, 2021

BBAI ULTIMATE HOLDINGS, LLC

By: /s/ Jeffrey Hart
Name: Jeffrey Hart
Title: Vice President and Secretary

AE BBAI AGGREGATOR, LP

By: AE BBRED GP, LLC
Its: General Partner

By: /s/ Kirk Konert
Name: Kirk Konert
Title: President

AEROEQUITY GP, LLC

By: /s/ Michael R. Greene
Name: Michael R. Greene
Title: Managing Member

By: /s/ Michael R. Greene
Name: Michael R. Greene

By: /s/ David H. Rowe
Name: David H. Rowe