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

SCHEDULE 13G

Under the Securities Exchange Act of 1934 (Amendment No.)*

Hesai Group

(Name of Issuer)

Class B Ordinary Shares, US\$0.0001 par value per share

American depositary shares, each representing one Class B Ordinary Share

(Title of Class of Securities)

428050108**

(CUSIP Number)

December 31, 2023

(Date of Event Which Requires Filing of this Statement)

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

- $\square \qquad \text{Rule 13d-1(b)}$
- \Box 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 the disclosures provided in a prior cover page.

** There is no CUSIP number assigned to the Class B Ordinary Shares. CUSIP number 428050108 has been assigned to the American Depositary Shares ("ADSs") of the Issuer. Each ADS represents one Class B Ordinary Share.

The information required in 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).

CUSIP No. 428050108** 1. Names of Reporting Persons Lightspeed Opportunity Fund, L.P. 2. Check the Appropriate Box if a Member of a Group (See Instructions) (a) \square ⊠ (1) (b) SEC Use Only 3. 4. Citizenship or Place of Organization Cayman Islands 5. Sole Voting Power 0 Number of 6. Shared Voting Power Shares Beneficially 10,688,294 shares Owned by 7. Sole Dispositive Power Each Reporting 0 Person With 8. Shared Dispositive Power 10,688,294 shares Aggregate Amount Beneficially Owned by Each Reporting Person 9. 10,688,294 shares 10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) 11. Percent of Class Represented by Amount in Row (9) 9.3% of Ordinary Shares (12.5% of Class B Ordinary Shares) (2) 12. Type of Reporting Person (See Instructions) PN

(1) This Schedule 13G is filed by Lightspeed Opportunity Fund, L.P., a Cayman Islands exempted limited partnership ("Opportunity"), Lightspeed General Partner Opportunity Fund, Ltd., a Cayman Islands exempted limited partnership ("LGP"), Lightspeed Ultimate General Partner Opportunity Fund Ltd., a Cayman Islands exempted company ("LUGP"), Arif Janmohamed ("Janmohamed") and Ravi Mhatre ("Mhatre" and, with Opportunity, LGP, LUGP and Janmohamed collectively, the "Reporting Persons"). The Reporting Persons expressly disclaim status as a "group" for purposes of this Schedule 13G.

(2) These percentages are based on a total of 115,534,593 ordinary shares (30,033,379 Class A ordinary shares and 85,501,214 Class B ordinary shares) outstanding as of December 31, 2022, as reported in the Issuer's Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 20, 2023.

CUSIP No. 428050108** 1. Names of Reporting Persons Lightspeed General Partner Opportunity Fund, L.P. 2. Check the Appropriate Box if a Member of a Group (See Instructions) (a) 図(1) (b) SEC Use Only 3. 4. Citizenship or Place of Organization Cayman Islands 5. Sole Voting Power 0 Number of 6. Shared Voting Power Shares Beneficially 10,688,294 shares Owned by Sole Dispositive Power 7. Each Reporting 0 Person With 8. Shared Dispositive Power 10,688,294 shares Aggregate Amount Beneficially Owned by Each Reporting Person 9. 10,688,294 shares 10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) 11. Percent of Class Represented by Amount in Row (9) 9.3% of Ordinary Shares (12.5% of Class B Ordinary Shares) (2) 12. Type of Reporting Person (See Instructions) PN This Schedule 13G is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a "group" for purposes of this Schedule (1) 13G.

(2) These percentages are based on a total of 115,534,593 ordinary shares (30,033,379 Class A ordinary shares and 85,501,214 Class B ordinary shares) outstanding as of December 31, 2022, as reported in the Issuer's Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 20, 2023.

CUSIP No. 428050108**

| | 1 | rting Persons | | | | |
|---|---|---|--|--|--|--|
| Lighten | Lightspeed Ultimate General Partner Opportunity Fund, Ltd. | | | | | |
| | | | | | | |
| | | opriate Box if a Member of a Group (See Instructions) | | | | |
| (a) | | | | | | |
| (b) | 区(1) | | | | | |
| SEC U | se Only | | | | | |
| Citizen | ship or P | Place of Organization | | | | |
| Cayma | n Islands | s | | | | |
| | 5. | Sole Voting Power | | | | |
| | | 0 | | | | |
| of | 6. | Shared Voting Power | | | | |
| lly | | 10,688,294 shares | | | | |
| ý | 7. | Sole Dispositive Power | | | | |
| g ïth | | 0 | | | | |
| | 8. | Shared Dispositive Power | | | | |
| | | 10,688,294 shares | | | | |
| Aggreg | ate Amo | ount Beneficially Owned by Each Reporting Person | | | | |
| 10,688,294 shares | | | | | | |
| Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) | | | | | | |
| Percent of Class Represented by Amount in Row (9) | | | | | | |
| 9.3% o | f Ordinar | ry Shares (12.5% of Class B Ordinary Shares) (2) | | | | |
| | | ng Person (See Instructions) | | | | |
| 00 | | | | | | |
| 1 y i | (a) (b) SEC U Citizen Cayma f f lly , , , , , , , , , , , , , | (a) □ (b) ⊠ (1) SEC Use Only Citizenship or P Cayman Islands 5. f 6. lly 7. ith 8. Aggregate Amo 10,688,294 shar Check if the Ag Percent of Class 9.3% of Ordinar Type of Reporti | | | | |

13G.
 (2) These percentages are based on a total of 115,534,593 ordinary shares (30,033,379 Class A ordinary shares and 85,501,214 Class B ordinary shares) outstanding as of December 31, 2022, as reported in the Issuer's Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 20, 2023.

CUSIP No. 428050108**

| 1. | Name | s of Repo | orting Persons | |
|------------------|---|------------|---|--|
| | Arif Ja | anmohan | ned | |
| 2. | Check | the App | ropriate Box if a Member of a Group (See Instructions) | |
| | (a) | | | |
| | (b) | ⊠(1) | | |
| 3. | SEC U | Jse Only | | |
| 4. | Citizer | nship or l | Place of Organization | |
| | United | l States o | of America | |
| | | 5. | Sole Voting Power | |
| | | | 0 | |
| Number Shares | of | 6. | Shared Voting Power | |
| Benefici | | | 10,688,294 shares | |
| Owned b Each | ру | 7. | Sole Dispositive Power | |
| Reportin | | | 0 | |
| Person V | Vith | 8. | Shared Dispositive Power | |
| | | | 10 (20 204 have | |
| 9. | Δ ggre | oate Δm | 10,688,294 shares ount Beneficially Owned by Each Reporting Person | |
|). | | - | | |
| | | 8,294 sha | | |
| 10. | Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) | | | |
| 11. | Percent of Class Represented by Amount in Row (9) | | | |
| | 9.3% (| of Ordina | ary Shares (12.5% of Class B Ordinary Shares) (2) | |
| 12. | Type of Reporting Person (See Instructions) | | | |
| | IN | | | |
| | | | | |

(2) These percentages are based on a total of 115,534,593 ordinary shares (30,033,379 Class A ordinary shares and 85,501,214 Class B ordinary shares) outstanding as of December 31, 2022, as reported in the Issuer's Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 20, 2023.

CUSIP No. 428050108**

| 1. | Name | s of Repo | orting Persons | | | |
|------------------|---|------------|---|--|--|--|
| | Ravi I | Mhatre | | | | |
| 2. | Check | the App | ropriate Box if a Member of a Group (See Instructions) | | | |
| | (a) | | | | | |
| | (b) | ⊠(1) | | | | |
| 3. | SEC Use Only | | | | | |
| 4. | Citizenship or Place of Organization | | | | | |
| | United | d States o | f America | | | |
| | | 5. | Sole Voting Power | | | |
| | | | 0 | | | |
| Number Shares | of | 6. | Shared Voting Power | | | |
| Benefici | | | 10,688,294 shares | | | |
| Owned t Each | by | 7. | Sole Dispositive Power | | | |
| Reportin | | | 0 | | | |
| Person V | With | 8. | Shared Dispositive Power | | | |
| | | | | | | |
| 9. | Aggre | ante Am | 10,688,294 shares ount Beneficially Owned by Each Reporting Person | | | |
| 9. | Aggie | gate Alli | built Beneficiary Owned by Each Reporting reison | | | |
| | | 8,294 sha | | | | |
| 10. | Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) | | | | | |
| 11. | Percent of Class Represented by Amount in Row (9) | | | | | |
| | 9.3% | of Ordina | ry Shares (12.5% of Class B Ordinary Shares) (2) | | | |
| 12. | Type of Reporting Person (See Instructions) | | | | | |
| | IN | | | | | |
| | | | | | | |

(2) These percentages are based on a total of 115,534,593 ordinary shares (30,033,379 Class A ordinary shares and 85,501,214 Class B ordinary shares) outstanding as of December 31, 2022, as reported in the Issuer's Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 20, 2023.

| | (a) | Name of Issuer | | | | | |
|---------|-----|--|--|---------|--|--|--|
| | | Hesai Group | | | | | |
| | (b) | Address of Issuer' | s Principal Executive C | Offices | | | |
| | | 9 th Floor, Building 1588 Zhuguang Ro Shanghai 201702 | , L2-B bad, Qingpu District | | | | |
| Item 2. | | | | | | | |
| | (a) | Name of Person F | iling | | | | |
| | | Lightspeed Genera | ("Janmohamed") | Fund, L | | | |
| | (b) | Address of Princip | al Business Office or, i | f none, | Residence | | |
| | | c/o Lightspeed Ver 2200 Sand Hill Ro Menlo Park, CA 9 | ad | | | | |
| | (c) | Citizenship | | | | | |
| | | Entities: | Opportunity LGP LUGP | - | Cayman Islands Cayman Islands Cayman Islands | | |
| | | Individuals: | Janmohamed Mhatre | - | United States of America United States of America | | |
| | (d) | Title of Class of Se | ecurities | | | | |
| | | | Shares, US\$0.0001 par Iry shares, each represe | | er share ne Class B Ordinary Share | | |
| | (e) | CUSIP Number | | | | | |
| | | 428050108** | | | | | |

Item 1.

** There is no CUSIP number assigned to the Class B Ordinary Shares. CUSIP number 428050108 has been assigned to the American Depositary Shares ("ADSs") of the Issuer. Each ADS represents one Class B Ordinary Share.

Item 3. If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a: Not applicable

Item 4. Ownership

The following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1 is provided as of December 31, 2023:

| Reporting Persons | Shares Held Directly | Shared Voting Power | Shared Dispositive Power | Beneficial Ownership | Percentage of Total Ordinary Shares (2) | Percentage of Class B Ordinary Shares (2) |
|-------------------|-------------------------|---------------------------|--------------------------------|-------------------------|--|--|
| Opportunity (1) | 10,688,294 | 10,688,294 | 10,688,294 | 10,688,294 | 9.3% | 12.5% |
| LGP(1) | | 10,688,294 | 10,688,294 | 10,688,294 | 9.3% | 12.5% |
| LUGP(1) | | 10,688,294 | 10,688,294 | 10,688,294 | 9.3% | 12.5% |
| Janmohamed (1) | | 10,688,294 | 10,688,294 | 10,688,294 | 9.3% | 12.5% |
| Mhatre (1) | | 10,688,294 | 10,688,294 | 10,688,294 | 9.3% | 12.5% |

- (1) Includes 10,688,294 Class B Ordinary Shares held by Opportunity which may be deemed to be beneficially owned by LGP, LUGP, and Janmohamed and Mhatre because (i) LGP is the general partner of Opportunity, (ii) LUGP is the general partner of LGP and (iii) Janmohamed and Mhatre serve as directors of LUGP. Each of the Reporting Persons (other than Opportunity) and each of their affiliated entities and the officers, directors, partners, members and managers thereof, disclaims beneficial ownership of the securities held directly by Opportunity.
- (2) These percentages are based on a total of 115,534,593 ordinary shares (30,033,379 Class A ordinary shares and 85,501,214 Class B ordinary shares) outstanding as of December 31, 2022, as reported in the Issuer's Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 20, 2023.

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 person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following \Box

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

 Not applicable
 Not applicable
- Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company or Control Person 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 Not applicable

Signature

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

Dated: February 14, 2024

Lightspeed Opportunity Fund, L.P.

| By: | Lightspeed General Partner Opportunity Fund, L.P. |
|-----|--|
| its | General Partner |
| By: | Lightspeed Ultimate General Partner Opportunity Fund, Ltd. |
| its | General Partner |
| By: | /s/ Ravi Mhatre Name: Ravi Mhatre Title: Duly Authorized Signatory |

Lightspeed General Partner Opportunity Fund, L.P.

| By: | Lightspeed Ultimate General Partner Opportunity Fund, Ltd. |
|-----|--|
| its | General Partner |

By: /s/ Ravi Mhatre Name: Ravi Mhatre Title: Duly Authorized Signatory

Lightspeed Ultimate General Partner Opportunity Fund, Ltd.

/s/ Ravi Mhatre Name: Ravi Mhatre Title: Duly Authorized Signatory

/s/ Arif Janmohamed Arif Janmohamed

Arii Janmonamed

/s/ Ravi Mhatre

Ravi Mhatre

By:

ATTENTION

Intentional misstatements or omissions of fact constitute Federal Criminal Violations (See 18 U.S.C. 1001).

Exhibit(s):

<u>A</u> Joint Filing Agreement

EXHIBIT A

JOINT FILING AGREEMENT

We, the undersigned, hereby express our agreement that the attached Schedule 13G (or any amendments thereto) relating to the Class B Ordinary Shares of Hesai Group is filed on behalf of each of us.

Dated: February 14, 2024

Lightspeed Opportunity Fund, L.P.

| By: its | Lightspeed General Partner Opportunity Fund, L.P. General Partner |
|---------------|---|
| By: its | Lightspeed Ultimate General Partner Opportunity Fund, Ltd. General Partner |
| By: | /s/ Ravi Mhatre |
| | Name: Ravi Mhatre |
| | Title: Duly Authorized Signatory |
| | |
| Lights | peed General Partner Opportunity Fund, L.P. |
| Lights By: | peed General Partner Opportunity Fund, L.P. |
| 0 | |
| By: | Lightspeed Ultimate General Partner Opportunity Fund, Ltd. |
| By: its | Lightspeed Ultimate General Partner Opportunity Fund, Ltd. General Partner |

Lightspeed Ultimate General Partner Opportunity Fund, Ltd.

| By: | /s/ Ravi Mhatre |
|-----|----------------------------------|
| | Name: Ravi Mhatre |
| | Title: Duly Authorized Signatory |

/s/ Arif Janmohamed

Arif Janmohamed

/s/ Ravi Mhatre Ravi Mhatre