**The University of Pennsylvania**                    Level:Undergraduate

Primary Program
            Program: College of Arts & Sciences Bachelor of Arts
           Division : College of Arts & Sciences
              Major : Mathematics
      Concentration : Non Designated
              Major : Biology
      Concentration : Computational Biology
              Minor : Computer Science
                      Data Science

Secondary Program(s)
            Program : Wharton Undergraduate - Bachelor of Science
                      in Economics
           Division : Wharton School Undergraduate
              Major : Statistics

| SUBJ | NO. | COURSE TITLE | CU | GRD | R |
|------|-----|--------------|----|----|---|

TRANSFER CREDIT ACCEPTED BY THE INSTITUTION:

Spring 2018 Advanced Placement Credit

| MATH | 104 | Calculus, Part I | 1.00 | TR | |
|------|-----|------------------|------|----|---|

Ehrs:  1.00

Spring 2019 Advanced Placement Credit

| PHYS | 150 | Principles of Physics I: Mecha | 1.50 | TR | |
|------|-----|-------------------------------|------|----|---|
| PHYS | 151 | Principles of Physics II: Elec | 1.50 | TR | |

Ehrs:   3.00

Spring 2020 Advanced Placement Credit

| CIS | 110 | Introduction to Computer Progr | 1.00 | TR | |
|-----|-----|-------------------------------|------|----|---|

Ehrs:  1.00

Fall 2021   Advanced Standing Credit

| MATH | 1410 | Calculus II | 1.00 | TR | |
|------|------|-------------|------|----|---|

Ehrs:  1.00

INSTITUTION CREDIT:

******************** CONTINUED ON NEXT COLUMN ******************

| SUBJ | NO. | COURSE TITLE | CU | GRD | R |
|------|-----|--------------|----|----|---|

Institution Information continued:

Summer 2021
  College of Liberal and Professional Studies Summer Sessions
  Programs

| ECON | 101 | Intermed Microeconomics | 1.00 | A+ | |
|------|-----|-------------------------|------|----|---|

  Ehrs:  1.00 GPA-Hrs: 1.00   QPts:    4.00 GPA:   4.00

Fall 2021
  College of Arts & Sciences

| BIOL | 121 | Intro Bio-Molec Bio Life | 1.00 | A | |
|------|-----|--------------------------|------|----|---|
| BIOL | 123 | Intro. Molec. Biol. Lab | 0.50 | A+ | |
| CIS | 160 | Math Found Comp Sci | 1.00 | A | |
| MATH | 240 | Calculus III | 1.00 | A+ | |
| MUSC | 005 | College Music Program | 0.50 | A+ | |
| MUSC | 007 | Ensemble Performance: Univ. Orchestra | 0.50 | A | |
| PHIL | 414 | Phil of Math | 1.00 | A | |

  Ehrs:  5.50 GPA-Hrs: 5.50   QPts:   22.00 GPA:   4.00

Spring 2022
  College of Arts & Sciences

| CIS | 120 | Prog Lang & Tech I | 1.00 | A | |
|-----|-----|--------------------|------|----|---|
| FNCE | 100 | Corporate Finance | 1.00 | A | |
| MATH | 314 | Advanced Linear Algebra | 1.00 | A | |
| MUSC | 005 | College Music Program | 0.50 | A+ | |
| SOCI | 010 | Social Stratification | 1.00 | A | |
| STAT | 430 | Probability | 1.00 | A | |
| WRIT | 073 | Writing Seminar in Phil: Delusions of Invulnerability | 1.00 | A | |

  Ehrs:  6.50 GPA-Hrs: 6.50   QPts:   26.00 GPA:   4.00
Dean's List - Academic Year

Fall 2022
  College of Arts & Sciences

Record of: Tianhao Luo                                    U N O F F I C I A L          Page:   2
      Penn ID: 60540156
Date of Birth: 01-FEB
   Date Issued: 26-NOV-2024                    The University of Pennsylvania

                                                                               Level:Undergraduate

| SUBJ | NO. | COURSE TITLE | CU | GRD | R |
|------|-----|--------------|-----|-----|---|
| Institution Information continued: | | | | | |
| BIOL | 2210 | Molecular Biology and Genetics | 1.00 | A | |
| CIS | 1210 | Programming Languages and Techniques II | 1.00 | B+ | |
| MATH | 3600 | Advanced Calculus | 1.00 | A | |
| MATH | 5861 | Mathematical Modeling in Biology | 1.00 | A | |
| OIDD | 1010 | An Introduction to Operations, Information and Decisions | 1.00 | A+ | |
| STAT | 3990 | Wharton Directed Reading Program in Statistics and Data Science | 0.50 | P | |
| STAT | 4330 | Stochastic Processes | 1.00 | A- | |
| WH | 1010 | Business and You: Exploring Business Pathways and Developing Your Potential | 0.50 | P | |

          Ehrs:  7.00 GPA-Hrs: 6.00   QPts:   23.00 GPA:   3.83

Spring 2023
  College of Arts & Sciences

| SUBJ | NO. | COURSE TITLE | CU | GRD | R |
|------|-----|--------------|-----|-----|---|
| ACCT | 1010 | Accounting and Financial Reporting | 1.00 | A+ | |
| BIOL | 2410 | Evolutionary Biology | 1.00 | A+ | |
| MATH | 3610 | Advanced Calculus | 1.00 | A | |
| MKTG | 1010 | Introduction to Marketing | 1.00 | A+ | |
| MUSC | 1300 | 1000 Years of Musical Listening | 1.00 | A | |
| PHIL | 1000 | Introduction to Philosophy | 1.00 | A | |
| STAT | 4420 | Introduction to Bayesian Data Analysis | 1.00 | A | |
| WH | 2010 | Business Communication for Impact | 0.50 | A | |

          Ehrs:  7.50 GPA-Hrs: 7.50   QPts:   30.00 GPA:   4.00
Dean's List - Academic Year

| SUBJ | NO. | COURSE TITLE | CU | GRD | R |
|------|-----|--------------|-----|-----|---|
| Institution Information continued: | | | | | |
| Fall 2023 | | | | | |
| College of Arts & Sciences | | | | | |
| BIOL | 3999 | Independent Study | 1.00 | A | |
| BIOL | 4536 | Intro Comp Bio&Bio Model | 1.00 | A | |
| CIS | 5200 | Machine Learning | 1.00 | A | |
| MGMT | 1010 | Intro To Management | 1.00 | A+ | |
| MUSC | 0070 | Ensemble Performance: Penn Chamber Music Soc | 0.50 | A | |
| OIDD | 2910 | Negotiations | 1.00 | A- | |
| OIDD | 3140 | Enabling Technologies | 0.50 | A | |
| STAT | 4310 | Statistical Inference | 1.00 | A+ | |

          Ehrs:  7.00 GPA-Hrs: 7.00   QPts:   27.70 GPA:   3.96

Spring 2024
  College of Arts & Sciences

| SUBJ | NO. | COURSE TITLE | CU | GRD | R |
|------|-----|--------------|-----|-----|---|
| ACCT | 1020 | Strategic Cost Analysis | 1.00 | A | |
| BIOL | 1124 | Intro Organism Biol. Lab | 0.50 | A+ | |
| BIOL | 4231 | Genome Sci & Genomic Med | 1.00 | A+ | |
| BSTA | 7870 | Stat Genetics/Hum Dis | 1.00 | A | |
| HCMG | 2150 | Mgmt&Econofpharma,Biotec | 1.00 | A | |
| MATH | 2410 | Calculus, Part IV | 1.00 | A+ | |
| MATH | 4100 | Complex Analysis | 1.00 | A | |
| MUSC | 0050 | College Music Program | 0.50 | A+ | |
| WH | 2990 | Honors Thesis | 0.50 | A | |

          Ehrs:  7.50 GPA-Hrs: 7.50   QPts:   30.00 GPA:   4.00

Fall 2024

| SUBJ | NO. | COURSE TITLE | CU | GRD | R |
|------|-----|--------------|-----|-----|---|
| ANTH | 1300 | Intro to Med Archaeology | 1.00 | IN PROGRESS | |
| BIOL | 4999 | Advanced Independent Study | 1.00 | IN PROGRESS | |
| LGST | 1010 | Law and Social Values | 1.00 | IN PROGRESS | |
| MATH | 3700 | Algebra | 1.00 | IN PROGRESS | |
| MGMT | 3010 | Tmwrk & Intrper Influenc | 0.50 | IN PROGRESS | |
| STAT | 4320 | Mathematical Statistics | 1.00 | IN PROGRESS | |

| SUBJ | NO. | COURSE TITLE | CU | GRD | R |
|------|-----|--------------|----|----|---|
| College of Arts & Sciences continued: | | | | | |
| STAT | 9610 | Statistical Methodology | 1.00 | IN PROGRESS | |
| WH | 2991 | Honors Thesis | 0.50 | IN PROGRESS | |
| | | In Progress Credits     7.00 | | | |

Spring 2025

| SUBJ | NO. | COURSE TITLE | CU | GRD | R |
|------|-----|--------------|----|----|---|
| FNCE | 1010 | Monetary Economics and the Global Economy | 1.00 | IN PROGRESS | |
| FNCE | 2320 | International Banking | 1.00 | IN PROGRESS | |
| MATH | 3710 | Algebra | 1.00 | IN PROGRESS | |
| STAT | 4760 | Appl Prob Models Mktg | 1.00 | IN PROGRESS | |
| STAT | 9915 | Sem In Adv Appl of Stat: Advanced Topics in Biomedical Data Science | 1.00 | IN PROGRESS | |
| | | In Progress Credits     5.00 | | | |

********************* TRANSCRIPT TOTALS *********************

| | Earned Hrs | GPA Hrs | Points | GPA |
|--|-----------|---------|--------|-----|
| TOTAL INSTITUTION | 42.00 | 41.00 | 162.70 | 3.97 |
| TOTAL TRANSFER | 6.00 | | | |
| OVERALL | 48.00 | 41.00 | 162.70 | 3.97 |

********************* END OF TRANSCRIPT *********************