Name: Opal, Anuj Student ID: 20613132

Ontario Education Nbr: 595575994

# **Beginning of Undergraduate Record**

#### Fall 2015

| Program:<br>Level:  |                           | e, Honours, Co-operative Program<br>ad: Full-Time  | Form Of Study: Enrolment                       |  |   |   |
|---|---------------------------|--|--|--|---|---|
| Course CS ENGL MATH MATH PHYS Term GPA Cumulativ Faculty Av Academic          | e GPA<br>verage:          | Description  Designing Functional Programs Introduction to Academic Writing Algebra for Honours Mathematics Calculus 1 for Honours Mathematic Mechanics  85.40 Term Totals 85.40 Cumulative Totals 84.00 Computer Science, Ho  | s<br><u>lr</u>                                 | 0.50<br>0.50<br>0.50<br>0.50<br>0.50<br>0.50<br>0.50<br>1 GPA<br>2.50<br>2.50  | Earned<br>0.50<br>0.50<br>0.50<br>0.50<br>0.50<br><u>Earned</u><br>2.50<br>2.50 | Grade<br>87<br>90<br>82<br>83<br>85       |
| _   |                           |  | /inter 2016                                    |  |   |   |
| Program:<br>Level:  |                           | e, Honours, Co-operative Program<br>ad: Full-Time  | Form Of Study: Enrolment                       |  |   |   |
| Course CS ENGL MATH MATH PD PHYS Term GPA Cumulativ Faculty Av Academic       | e GPA<br>/erage:          | Description Elementary Algorithm Design and E Introduction to Literary Studies Linear Algebra 1 for Honours Mathe Calculus 2 For Honours Mathematic Co-op Fundamentals Introduction to the Universe  77.40 Term Totals 81.40 Cumulative Totals 81.00 Computer Science, Ho nt standing Effective 04/30/2016 | Oata Abstraction ematics cs                    | 0.50<br>0.50<br>0.50<br>0.50<br>0.50<br>0.50<br>0.50<br>0.50                   | Earned 0.50 0.50 0.50 0.50 0.50 0.00 0.50 Earned 2.50 5.00                      | Grade<br>80<br>79<br>78<br>76<br>CR<br>74 |
|   |                           | s  | pring 2016                                     |  |   |   |
| Program:<br>Level:  |                           | e, Honours, Co-operative Program<br>d: Part-Time   | Form Of Study: Co-op Wo                        | rk Term  |   |   |
| Course<br>COOP<br>PD  |                           | Description Co-operative Work Term Critical Reflection and Report Writin   | ng   | npted<br>0.50<br>0.50<br>0.50<br>1.00  | Earned<br>0.00<br>0.00<br>Earned<br>0.00  | <u>Grade</u><br>CR<br>CR                  |
| Cumulativ   | e GPA                     | 81.40 Cumulative Totals  |  | 5.00   | 5.00  |   |
| Program:<br>Level:  |                           | e, Honours, Co-operative Program<br>ad: Full-Time  | Fall 2016 Form Of Study: Enrolment             |  |   |   |
| Course CS CS ENGL PSYCH STAT Term GPA Cumulativ Major Ave Faculty Av Academic | e GPA<br>rage:<br>verage: | Description Logic and Computation Object-Oriented Software Developm Genres of Creative Writing Introduction to Cognitive Science Probability  81.40 Term Totals 81.40 Cumulative Totals 81.00 Computer Science, Ho 80.78 Computer Science, Ho nt standing Effective 12/31/2016                             | nent <u>Ir</u><br>inours, Co-operative Program | mpted<br>0.50<br>0.50<br>0.50<br>0.50<br>0.50<br>0.50<br>1 GPA<br>2.50<br>7.50 | Earned<br>0.50<br>0.50<br>0.50<br>0.50<br>0.50<br>Earned<br>2.50<br>7.50        | Grade<br>82<br>81<br>92<br>74<br>78       |

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Winter 2017

| Program: | Computer Science, Honours, Co-operative Program |  |
|----------|---|--|
|----------|---|--|

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|--------|------------|--|--------------------------------|
| Level: | 2B         | Load: Part-Time                                | Form Of Study: Co-op Work Term |

| Course  |      | Description                              | <u>Attempted</u> | <u>Earned</u> | <u>Grade</u> |
|---|------|--|------------------|---------------|--------------|
| COOP  | 2    | Co-operative Work Term                   | 0.50             | 0.00          | CR           |
| ENGL  | 200A | Survey of British Literature 1           | 0.50             | 0.50          | 83           |
| PD  | 10   | Professional Responsibility in Computing | 0.50             | 0.00          | CR           |
| WKRPT   | 200M | Work-term Report                         | 0.13             | 0.00          | 75           |
|   |      |  | <u>In GPA</u>    | <u>Earned</u> |              |
| Term GPA  |      | 83.00 Term Totals                        | 1.63             | 0.50          |              |
| Cumulative  | GPA  | 81.50 Cumulative Totals                  | 8.00             | 8.00          |              |
| Major Average: 81.00 Computer Science, Honours, Co-operative Pro- |      | ive Program                              |                  |               |              |
| Faculty Average: 80.78 Computer Science, Honours, Co-opera        |      | ive Program                              |                  |               |              |

Academic Standing: Excellent standing Effective 04/30/2017

Spring 2017

Program: Computer Science, Honours, Co-operative Program

Level: 2B Load: Full-Time Form Of Study: Enrolment

| Course   |     | Description                         | <u>Attempted</u> | <u>Earned</u> | <u>Grade</u> |
|----------|-----|-------------------------------------|------------------|---------------|--------------|
| CS       | 240 | Data Structures and Data Management | 0.50             | 0.50          | 69           |
| CS       | 241 | Foundations of Sequential Programs  | 0.50             | 0.50          | 87           |
| CS       | 251 | Computer Organization and Design    | 0.50             | 0.50          | 84           |
| MATH     | 239 | Introduction to Combinatorics       | 0.50             | 0.50          | 81           |
| PHYS     | 239 | Computational Physics 2             | 0.50             | 0.00          | 100          |
|          |     | No credit but included in average   |                  |               |              |
|          |     |                                     | <u>In GPA</u>    | <b>Earned</b> |              |
| Term GPA |     | 84.20 Term Totals                   | 2.50             | 2.00          |              |

Term GPA 84.20 Term Totals 2.50 2.00
Cumulative GPA 82.14 Cumulative Totals 10.50 10.00
Major Average: 80.50 Computer Science, Honours, Co-operative Program
Faculty Average: 80.62 Computer Science, Honours, Co-operative Program

Academic Standing: Excellent standing Effective 08/31/2017

Credit for PHYS 239 in spring 2017 term suppressed because anti-requisite course CS 136 passed in winter 2016 term. Both courses included in averages and course-attempt

count.

Fall 2017

Program: Computer Science, Honours, Co-operative Program

Level: 3A Load: Part-Time Form Of Study: Co-op Work Term

| Course     |      | <u>Description</u>      | <u>Attempted</u> | <u>Earned</u> | <u>Grade</u> |
|------------|------|-------------------------|------------------|---------------|--------------|
| COOP       | 3    | Co-operative Work Term  | 0.50             | 0.00          | CR           |
| ENGL       | 251A | Criticism 1             | 0.50             | 0.50          | 80           |
| PD         | 5    | Project Management      | 0.50             | 0.00          | CR           |
| WKRPT      | 300M | Work-term Report        | 0.13             | 0.00          | 75           |
|            |      |                         | <u>In GPA</u>    | <u>Earned</u> |              |
| Term GPA   |      | 80.00 Term Totals       | 1.63             | 0.50          |              |
| Cumulative | GPA  | 82.04 Cumulative Totals | 11.00            | 10.50         |              |
| N 4 - 1 A  |      | 00.50. O                |                  |               |              |

Major Average: 80.50 Computer Science, Honours, Co-operative Program Faculty Average: 80.62 Computer Science, Honours, Co-operative Program

Academic Standing: Excellent standing Effective 12/31/2017

Name: Opal, Anuj Student ID: 20613132

Ontario Education Nbr: 595575994

Winter 2018

|          |       |   | *************************************** |
|----------|-------|---|---|
| Program: | Compu | iter Science, Honours, Co-operative Program |   |
| Level:   | 3A    | Load: Full-Time                             | Form Of Study: Enrolment                |

| Course       |      | <u>Description</u>            | <u>Attempted</u> | <u>Earned</u> | <u>Grade</u> |
|--------------|------|-------------------------------|------------------|---------------|--------------|
| CS           | 341  | Algorithms                    | 0.50             | 0.50          | 78           |
| CS           | 350  | Operating Systems             | 0.50             | 0.50          | 77           |
| ENGL         | 208A | Forms of Fantasy              | 0.50             | 0.50          | 83           |
| ENGL         | 335  | Creative Writing 1            | 0.50             | 0.50          | 86           |
| PHIL         | 207J | Philosophy and J.R.R. Tolkien | 0.50             | 0.50          | 85           |
| Course Topic | :    | The Lord of the Rings         |                  |               |              |
|              |      |                               | <u>In GPA</u>    | <u>Earned</u> |              |
| Term GPA     |      | 81.80 Term Totals             | 2.50             | 2.50          |              |
| Cumulative G | PA   | 82.00 Cumulative Totals       | 13.50            | 13.00         |              |

Cumulative GPA82.00Cumulative Totals13.50Major Average:79.75Computer Science, Honours, Co-operative ProgramFaculty Average:80.20Computer Science, Honours, Co-operative Program

Academic Standing: Excellent standing Effective 05/18/2018

Spring 2018

Program: Computer Science, Honours, Co-operative Program
Level: 3B Load: Part-Time Form Of Study: Co-op Work Term

| <u>Course</u>  |      | <u>Description</u>                            | <u>Attempted</u> | <b>Earned</b> | <u>Grade</u> |
|--|------|---|------------------|---------------|--------------|
| COOP   | 4    | Co-operative Work Term                        | 0.50             | 0.00          | CR           |
| PD   | 8    | Intercultural Skills                          | 0.50             | 0.00          | CR           |
| WKRPT  | 400M | Work-term Report                              | 0.13             | 0.00          | 89           |
|  |      |   | <u>In GPA</u>    | <u>Earned</u> |              |
| Term GPA   |      | 0.00 Term Totals                              | 1.13             | 0.00          |              |
| Cumulative (   | 3PA  | 82.00 Cumulative Totals                       | 13.50            | 13.00         |              |
| Major Average: 79.75 Computer Science, Honours, Co-operative Program |      |   |                  |               |              |
| Faculty Average: 80.20 Computer Science, Honours, C                  |      | 80.20 Computer Science, Honours, Co-operation | ive Program      |               |              |

Fall 2018

Program: Computer Science, Honours, Co-operative Program

Level: 3B Load: Full-Time Form Of Study: Enrolment

| Course   |     | <u>Description</u>                      | <u>Attempted</u> | <u>Earned</u> | <u>Grade</u> |
|--|-----|---|------------------|---------------|--------------|
| CS   | 360 | Introduction to the Theory of Computing | 0.50             | 0.50          | 92           |
| CS   | 486 | Introduction to Artificial Intelligence | 0.50             | 0.50          | 86           |
| LS   | 101 | Introduction to Legal Studies           | 0.50             | 0.50          | 71           |
| STAT   | 231 | Statistics                              | 0.50             | 0.50          | 95           |
|  |     |   | <u>In GPA</u>    | <u>Earned</u> |              |
| Term GPA   |     | 86.00 Term Totals                       | 2.00             | 2.00          |              |
| Cumulative   | GPA | 82.52 Cumulative Totals                 | 15.50            | 15.00         |              |
| Major Average: 81.60 Computer Science, Honours, Co-operative Program |     |   |                  |               |              |

Major Average: 81.60 Computer Science, Honours, Co-operative Program Faculty Average: 82.00 Computer Science, Honours, Co-operative Program

Academic Standing: Excellent standing Effective 01/18/2019

Winter 2019

Program: Computer Science, Honours, Co-operative Program

Level: 4A Load: Part-Time Form Of Study: Co-op Work Term

| <u>Course</u>        |      | <u>Description</u>                         | <u>Attempted</u> | <b>Earned</b> | <u>Grade</u> |
|----------------------|------|--|------------------|---------------|--------------|
| COOP                 | 5    | Co-operative Work Term                     | 0.50             | 0.00          | CR           |
| ENGL                 | 200B | Survey of British Literature 2             | 0.50             | 0.50          | 85           |
|                      |      |  | <u>In GPA</u>    | <b>Earned</b> |              |
| Term GPA             |      | 85.00 Term Totals                          | 1.00             | 0.50          |              |
| Cumulative GP        | PΑ   | 82.59 Cumulative Totals                    | 16.00            | 15.50         |              |
| Major Average: 81.60 |      | 81.60 Computer Science, Honours, Co-operat | tive Program     |               |              |

Major Average: 81.60 Computer Science, Honours, Co-operative Program Faculty Average: 82.00 Computer Science, Honours, Co-operative Program

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Spring 2019

|          |      |   | Spring 2019              |
|----------|------|---|--------------------------|
| Program: | Comp | uter Science, Honours, Co-operative Program |                          |
| Level:   | 4A   | Load: Full-Time                             | Form Of Study: Enrolment |

| Course<br>CS<br>CS<br>ENGL | 454<br>458<br>294 | Description Distributed Systems Computer Security and Privacy Game Studies | Attempted | <u>Earned</u> | <u>Grade</u> |
|----------------------------|-------------------|--|-----------|---------------|--------------|
| PHIL                       | 251               | Metaphysics and Epistemology   |           |               |              |

#### Milestones

| Date Completed | Description                                      | Status    |
|----------------|--|-----------|
| 12/23/2015     | English Proficiency                              | Completed |
| 08/30/2016     | Work Report 1                                    | Completed |
| 08/30/2016     | Work Term 1                                      | Completed |
| 04/30/2017     | Work Report 2                                    | Completed |
| 04/30/2017     | Work Term 2                                      | Completed |
| 12/30/2017     | Work Report 3                                    | Completed |
| 12/30/2017     | Work Term 3                                      | Completed |
| 08/30/2018     | Work Report 4                                    | Completed |
| 08/30/2018     | Work Term 4                                      | Completed |
| 04/30/2019     | Undergraduate Communication Requirement - Part 1 | Completed |
| 04/30/2019     | Work Term 5                                      | Completed |
|                |  |           |

**Scholarships and Awards** 

University of Waterloo President's Scholarship of Distinction 2016

**End of Undergraduate Unofficial Transcript**