

## NIKHIL PANDE

+91 9326563217 / nikhil.pande2207@gmail.com

### EDUCATION

---

<b>Obero International School (OIS)</b> , OGC Campus, Mumbai – Class of 2025	2016 – Present
<i>International Baccalaureate Diploma Programme (IBDP)</i> , Grade 12	2023 – Present
<i>Middle Years Program (MYP)</i> , Grade 10	2018 – 2023

### STANDARDISED TEST SCORES

---

<b>SAT</b> — 1520 (790 Math; 730 Reading and Writing)	October 2024
---	--------------

### ACADEMIC HONOURS & AWARDS

---

#### *School Awards*

- **IB Sports Science Award:** For subject proficiency both in and out of school May 2024
- **IB Student of The Year:** For demonstrating excellence in the academic year 2022-2023 May 2023
- **IB Leadership Award:** For exceptional participation and initiative in academics and extracurriculars in the academic year 2022-23 May 2023
- **MYP 5 Distinction:** For strong academic attainment (53/56); received Rs.1 lakh scholarship May 2023

#### *Mathematics Awards – International*

- **Silver** — Hong Kong International Math Olympiad (HKIMO) August 2023
- **Distinction** — Galois Exam (CEMC, University of Waterloo) March 2023
- **Distinction** — Cayley Exam (CEMC, University of Waterloo) February 2023
- **Gold + Silver + Bronze Medals** — South East Asian Mathematics Competition (SEAMC) March 2019

### ECONOMICS & MATHEMATICS EXPERIENCES

---

#### *Research*

- **Gig Economy Impact on Employment** — Conducted research on impact of Gig economy on employment stability and worker benefits. Published in IOSR Journal of Business and Management, and EPH – International Journal of Business Management Science October 2024
- **High School International Economics Essay Competition (HIEEC)** — Conducted research and compared the efficacy of carbon taxes vs subsidies in reducing greenhouse gas emissions. Suggested alternative policies (i) tradable permits, (ii) Pigovian taxes, and (iii) environmental standards, as effective measures to further reduce greenhouse gas emissions. December 2024
- **Fractals in Music** — Conducted research on fractal dimensions of waveforms of sound files by detailed analysis of decomposition coefficients yielded by waveform through the wavelet function August 2024
- **Approach Shot Strategy** — Attempted to create a mathematical model using the Strokes Gained statistic in golf that could be used to yield the optimal approach shot strategy for a golfer August 2023

#### *Online Courses*

- **Number Theory and Cryptography** July 2024
- **Mathematics for Machine Learning: Multivariate Calculus** December 2024

## MATHEMATICS EMPOWERMENT INITIATIVES

---

<i>CourseLeap Education (<a href="https://courseleap.org/">https://courseleap.org/</a>)</i>	June-July 2024
<ul style="list-style-type: none"><li>● CourseLeap Education is an organisation that conducts online courses to help students prepare for competitive math exams (AMC 8, 10 &amp; 12). The company is creating an online self-study version of their course by developing problem-solving videos that students can learn from</li><li>● Developed 25+ problem-solving videos on various math topics</li><li>● Created 20+ concept-based practice quizzes for students</li><li>● Wrote Blog Posts for the organisation to give prospective students a preliminary look into the learnings they can receive from the course, highlighting efficient preparation techniques, test-taking strategies, and providing an overview of the test format and scoring</li></ul>	
<i>Maths 101</i>	October 2024
<ul style="list-style-type: none"><li>● Created a set of 'open for free use' conceptual videos (each ranging from 7-10 minutes) on MYP 4-5 Math syllabus topics including surds, quadratic equations, logarithmic and trigonometry functions, to provide math learning resource to MYP students</li></ul>	
<i>Root to Success</i>	October 2023
<ul style="list-style-type: none"><li>● Founder and head of a math club in school focused on preparing students for competitive math exams (AMC, CEMC, HKIMO)</li></ul>	
<i>Shoonya Math Competition 2023</i>	October 2023
<ul style="list-style-type: none"><li>● Led creation of exam paper for the Shoonya Math Competition 2023 at OIS (in collaboration with World Mathematics Championships®) and helped with event organisation</li></ul>	

## GOLF PURSUITS

---

<b>Scratch Golfer</b> — Handicap Index of 0.9	Present
<ul style="list-style-type: none"><li>● <b>2nd Runner-Up</b> — Western India IGU Amateur Feeder Tour @ Willingdon Sports Club</li><li>● <b>4th Place</b> — Hyundai Indian Junior Golf National Final @ ITC Classic Golf + Country Club</li><li>● <b>22nd Place</b> — Indian Golf Union All India Western India Open @ Poona Golf Club</li><li>● <b>Winner</b> — Western India IGU Junior Feeder Tour @ Gulmohar Greens Club</li><li>● <b>2nd Runner-Up</b> — Hurricane Junior Golf Tour @ Fairchild Wheeler Golf Club (USA)</li><li>● <b>Runner-Up</b> — Hurricane Junior Golf Tour @ Architects Golf Club (USA)</li><li>● <b>3<sup>rd</sup> Rank</b> — Western India Junior Tour Merit List, automatically qualifying for the Indian Junior National Circuit for 2022 Calendar Year</li><li>● <b>2nd Runner-Up</b> Western India Junior Tour— Golf</li><li>● <b>Winner</b> — Western India IGU Junior Feeder Tour @ Poona Club</li><li>● <b>Runner-Up</b> — Western India IGU Junior Feeder Tour @ Poona Club</li><li>● <b>Winner</b> — Western India IGU Junior Feeder Tour @ Willingdon Sports Club</li></ul>	March 2024 December 2023 December 2022 November 2022 June 2022 June 2022 2022 May-December 2021 November 2021 October 2021 October 2021

## PIANO & MUSIC PURSUITS

---

<i>Training</i>	
<b>Trinity College of Music Exams:</b> Distinction — Practical Grade 1-5 & Theory Grade 1-3	June 2012-Present
<i>Outreach</i>	
<ul style="list-style-type: none"><li>● Taught piano to children with visual impairments and spasticity, focusing on developing technical and motor skills, and providing exposure to different music genres</li></ul>	August 2019-Present

- Organized Solo Piano and Choir performance by children of the Happy Home and School for the Blind at the Oberoi International School, attended by 400+ students

October 2024

---

### EXTRACURRICULAR ACTIVITIES

---

#### *Chess*

- **Competitive Chess Player** — Consistently rated in Top 50 USCF player rankings (US Chess Federation) in the K-6 category June 2012-July 2016
- **2nd place in Chess Nationals** — Finished Runners-up four times at the USCF Primary National Team Championships (May'14, Dec'14, May'15 & Dec'15)
- **Core Team Member** — The Dalton School Chess Team (New York City)

#### *Squash*

**Top 75 Junior Squash Player** — Received career-high ranking of 74 in India BU13 squash

April 2019

---

### INTERESTS

---

Cooking; Piano; Playing Cricket, Basketball, Squash; Watching Sports