Marko Brnović

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EDUCATION

New York University Abu Dhabi — Abu Dhabi, United Arab Emirates
Bachelor of Science - Physics and Mathematics joint degree; GPA: 3.825/4.0 — Sept. 2018 - May 2022
Honors: *Studying with a full academic scholarship*
Courses: *Multivariable Calculus, Ordinary Differential Equations, Real Analysis, Probability and Statistics, Statistical Mechanics and Thermodynamics, Mechanics, Electricity and Magnetism, Electromagnetism and Special Relativity, Mathematical Modelling, Quantum Mechanics, Fluid Dynamics, Capstone Project in Physics*

Bede's Senior School — East Sussex, United Kingdom
AQA A-Levels; A* (Maths) A* (Further Maths) A* (Physics) A (Chemistry) — Sept. 2016 - July 2018
Honors: *Studying with a full academic scholarship*

Grammar School "Slobodan Skerovic" — Podgorica, Montenegro
General Montenegrin Educational System; GPA:4.0/4.0 — Sept. 2014 - June 2016

Elementary School "Sutjeska" — Podgorica, Montenegro
General Montenegrin Educational System; GPA:4.0/4.0 — Sept. 2005 - June 2014

EXPERIENCE

New York University Undergraduate Research Program — Abu Dhabi, United Arab Emirates
Capstone Researcher — Oct. 2020 - present
- **Co-engineered a code**: which simulates raft movement on top of a Rayleigh-Bénard convection cell and provides particular insight into yet-unexplored theory of intermittent boundary motion due to convection
- **Proved a theoretical postulate**: of dependence of a Rayleigh number on a Nusselt number in turbulent convective flow by means of a numerical simulation

Private Tutor — Montenegro; United Kingdom; United Arab Emirates
Self-employed — September 2016 - present
- **Provided more than 100 private tutoring lessons**: for Physics and Mathematics; primarily for students to be met with the Montenegrin national Matura exams, General Certificate of Secondary Education (GCSE) and A-Levels

Repetitio est Mater Studiorum (ReMS) — Podgorica, Montenegro
Physics and Mathematics Tutor — Sept. 2015 - present
- **Assisted in devising and popularising an innovative approach to teaching**: that aimed to provide holistic high quality education to children from low-income families
- **Tutored individuals and groups of middle-to-high school children**: including expanding the usual school curriculum resulting in an overall average increase of two grade points

LEADERSHIP & COMMUNITY ENGAGEMENT

Organisation of Montenegrins Studying Abroad (OMSA) Assembly — Tivat, Montenegro
Delegate — July 2019
- **Coordinated a nation-wide assembly of Montenegrin students studying abroad**: and discussed pertinent problems students encounter
- **Negotiated with the Ministry of Education**: the ratification and acceptance of foreign university diplomas in Montenegro to better incentivise community engagement and unity amongst young academics

Habitat for Humanity: Young Leaders Build — Negombo, Sri Lanka
Participant — March 2019
- **Built a home successfully**: intended for an underprivileged family of five while coordinating a team of ten people to build the foundation
- **Contributed to a group project which committed to**: enable families in Sri Lanka to achieve strength, stability, and self-reliance through shelter

PRONA Science Fair — Podgorica, Montenegro
Coordinator — June 2016 - July 2016
- **Designed and facilitated an interactive scientific presentative exposition**: through which young students can learn the elementary concepts of science such as basics of electromagnetism and chemical reactions

American Corner Montenegro — Podgorica, Montenegro
Volunteer — September 2015 - June 2016
- **Led a team of 7 peers**: in successfully cultivating a safe learning environment for 20 children
- **Provided English language lessons**: to underprivileged children through innovative games and modern educational mechanisms

SKILLS & INTERESTS

- **Languages**: Montenegrin (Native), English (Fluent), Spanish (Intermediate), Italian (Intermediate)
- **Softwares**: Python (scipy, matplotlib, manim), MATLAB, Mathematica, Desmos, Stata, Microsoft Office
- **Interests**: Education, Research, Volunteering, Philanthropy, Water Polo, Swimming, Basketball, Triathlon, Guitar
- **Soft Skills**: Simulations, Graphic Design, LaTeX writing, Leadership, Teamwork, Critical Thinking, Public Speaking