



CWSF 2016 - Montreal, Quebec



Sascha Bodak

Generating Musical Accompaniment Using Machine Learning

Challenge: Information **Category:** Senior

Region: Thames Valley
City: London, ON
School: A.B. Lucas S.S.

Abstract: From image recognition to natural language processing to genetic research,

learning algorithms that are capable of using past information to model patterns have become a major part of modern life whether the average person realizes it or not. In this project, a novel deep learning algorithm that is capable of producing a sophisticated musical accompaniment to a given

melody is presented.

Biography

My name is Sascha Bodak. In the future I hope to become a Software Engineer. My hobbies include reading, programming, and writing music. My love for music and computer science inspired this science fair project. I would urge anyone interested in starting their own project to find a great mentor who can guide you through the important steps required to bring your idea to life.

| Awards | Value |
|--|----------|
| Challenge Award - Information - Senior | |
| Sponsor: Youth Science Canada | |
| Excellence Award - Senior - Gold Medal | \$250 |
| Sponsor: Youth Science Canada | |
| Dalhousie University Faculty of Science Entrance Scholarship | \$5 000 |
| Senior Gold Medallist - \$5000 Entrance Scholarship | |
| Sponsor: Dalhousie University, Faculty of Science | |
| UBC Science (Vancouver) Entrance Award | \$4 000 |
| Senior Gold Medallist - \$4000 Entrance Scholarship | |
| Sponsor: The University of British Columbia (Vancouver) | |
| University of Manitoba Entrance Scholarship | \$5 000 |
| Senior Gold Medallist - \$5000 Entrance Scholarship | |
| Sponsor: University of Manitoba | |
| University of Ottawa Entrance Scholarship | \$4 000 |
| Senior Gold Medallist - \$4,000 Entrance Scholarship | |
| Sponsor: University of Ottawa | |
| Western University Scholarship | \$4 000 |
| Gold Medallist - \$4000 Entrance Scholarship | |
| Sponsor: Western University | |
| Total | \$22 250 |



