# Neural Network for composing music

**REQUEST FOR PROPOSAL**

***Musical Neural Network***

***03/20/2018***

***Nicolas van der Walt***

***Drikus Mostert***

***Ernes Smit***

***Marius Liebenberg***

***Joe Ash***

***Mkhize Mbalenhle***

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# 2. Proposed Timeline

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| Deliverable | DUE DATE | DUERATION |
| Proposals due. | 2018-03-21 | - |
| Release and distribution of RFP. | 2018-03-22 | - |
| Initial meetings. | Once per week on Tuesday | 1 hour |
| Sponsor selected. | 2018-03-22 | - |
| Deadline for sponsor to submit written questions and/or non-mandatory notice of intent. | 2018-04-16 | 6 weeks |
| Questions with written answers provided to sponsor. | 2018-04-30 | 2 weeks |
| Analyze requirements | 2018-00-00 |  |
| Development methodology chosen | 2018-00-00 |  |
| Development milestones Design architecture, frontend, backend | 2018-00-00 |  |
| Build app | 2018-00-00 |  |
| Drop-dead Date (no new concepts/functionality added). | 2018-00-00 |  |
| Beta app launch. | 2018-00-00 |  |
| Testing. | 2018-00-00 |  |
| Final testing and debugging | 2018-00-00 |  |
| Proposed app launch. | 2018-00-00 |  |
| Finished due date | 2018-00-00 |  |

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# 7. Tools and Functionalities

## Tools

### Programming language

**Python:**

* Python is one of the most widely used programming languages in the AI field of Artificial Intelligence thanks to its simplicity.
* It can seamlessly be used with the data structures and other frequently used AI algorithms
* The choice of Python for AI projects also stems from the fact that there are plenty of useful libraries that can be used in AI.
* You will also have no problems learning Python for AI as there are tons of resources available online.

### Deep learning libraries

**Tensorflow:**

* When it comes to neural machine translation, TensorFlow reduces errors by 55%-85%.
* In Neural architecture search, one can figure out what is the right neural network to use for a problem
* TensorFlow allows coders to iterate quickly, train models faster and run more experiments
* On the production end— teams can run TensorFlow on large-scale server farms embedded on devices, CPUs, GPUs, TPUs

### Development platform

**GitHub:**

* By using GitHub, you make it easier to get excellent documentation. Their help section and guides have articles for nearly any topic related to git that you can think of.
* GitHub can integrate with common platforms such as Amazon and Google Cloud, services such as Code Climate to track your feedback, and can highlight syntax in over 200 different programming languages,
* GitHub is a repository. What this means that it allows your work to get out there in front of the public.

## Functionality

* The functionality of this application is to generate music.
* Help musicians in the bleus genre to compose and generate music.
* To generate all types of genres in music.