# 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***

Table of Contents

[Sample: Request for Proposal 1](#_Toc412100242)

[1. Executive Summary 3](#_Toc412100243)

[2. Proposed Timeline 3](#_Toc412100244)

[3. Project Purpose and Description 4](#_Toc412100245)

[4. Project Scope 4](#_Toc412100246)

[5. Background of Proposed System 4](#_Toc412100247)

[6. Audience 4](#_Toc412100248)

[7. Tools and Functionalities 4](#_Toc412100249)

[8. Reporting Needs 5](#_Toc412100250)

[9. Proposed System Specification 5](#_Toc412100251)

[10. Available technology resources/integration issuers 5](#_Toc412100252)

[11. Budget & Cost estimates 5](#_Toc412100253)

[12. Proposal Evaluation Criteria/ Format for proposals 7](#_Toc412100254)

[1. Executive Summary 7](#_Toc412100255)

[2. Technical Volume 7](#_Toc412100256)

[3. Management Volume 7](#_Toc412100257)

[4. Budget Volume 7](#_Toc412100258)

# 1. Executive Summary

|  |  |
| --- | --- |
| a. | Describe the proposed system you wish to undertake. Is it a new site?  **Using TensorFlow we will be creating a neural network that can analyze and produce music.** |
| b. | What problems will this technology project solve or what new capabilities will it provide for your organization?  **It will open doors for any musician looking for unique musical inspiration.** |
| c. | If you have made a decision beforehand, indicate whether this site relies on a database to display information or will be "static" HTML.  We will be mostly working with Python as Tensorflow is written in it. |
| d. | Include a brief summary of the environment in which the hardware / software / services will operate.  **We will create a Github repository for easy access and easy workload management.**  **No special hardware is required.**  **Software – Tensorflow and other deep learning libraries.** |

# 

# 2. Proposed Timeline

|  |  |
| --- | --- |
| This section of the Request for Proposal should provide a description of what each responding organization’s proposal should contain. It should also include a timeline within which all proposals must be submitted. Any requirements that must be included in each proposal should be described in detail in this section of the RFP |  |
| (Please indicate the timeline you expect vendor to adhere to) |  |
| 1. Develop RFP process (forward email address for questions on RFP). 2. RFP release date. 3. Submission of questions on RFP. 4. Notification of Intention to bid. 5. Answers to questions emailed to all bidders. 6. Proposals due. 7. Finalist interviews. 8. Proposal award date. 9. Initial meetings. 10. Drop-dead Date (no new concepts/functionality added). 11. Beta site launch (if web project). 12. Proposed site launch (if web project). |  |
| Make sure your RFP sets out a schedule for the proposal and development process.  Below, an example of the proposal guidelines is provided |  |
| June 1, 2015 - Release and distribution of RFP June 15, 2015 - Deadline for vendors to submit written questions and/or non-mandatory  notice of intent June 17, 2015 - Questions with written answers provided to all interested vendors June 30, 2015, 9:00 am - deadline for submitting proposals July 10, 2015 - Finalists notified July 13, 2015 to July 17, 2009 - Finalist interviews July 22, 2015 - Vendor selected July 31, 2015 - Vendor signed |  |

# 3. Project Purpose and Description

The purpose of the proposed system is to create a neural network that we can train to recognize/analyze sheet music – Looking at the types of notes used in what way and the pauses between notes. The neuralnet can then generate its own unique music. Will it be capable of producing music indistinguishable from a human composer?

# 4. Project Scope

|  |
| --- |
| Included  * Project plan * Test plan * Source code * Requirements * Specification files * Documentation * Change Documents * System Design  Excluded  * Hardware will not be included * End user training documents |
|  |

5. Background of Proposed System

|  |
| --- |
| Tell vendors about your organization. Provide links to information on your existing Web site, if applicable. When was your organization founded? How many staff members does your organization have? |

6. Audience

|  |
| --- |
| 1. Define the audience that will be using the site. Do you have a defined group of users or "stakeholders" who will be regularly using the site and have different needs? |
| 1. Will the entire site be accessible to the general public? |
| 1. Will logins be required? Will there be a separate section for “members” or “admins”? |
| 1. Do you need the capability for staff or members to "log in" to access special information? |

7. Tools and Functionalities

|  |
| --- |
| 1. Essential components: are there certain features that are essential to any proposal you will consider? |
| 1. Non-essential components: Are there other features of your site that you would like but are not essential to submitted proposals? |

8. Reporting Needs

|  |
| --- |
| 1. If the site is database driven, what types of information will you regularly need to draw from it? |

# 9. Proposed System Specification

|  |
| --- |
| 1. Design parameters |
| 1. Accessibility/Usability 2. Usability testing mid-stream will validate navigation choices |
| 1. Platform, if applicable 2. Is this a redesign of a current site? If so, in what language is the current site built? (ex: cold fusion, ASP, PHP, Dreamweaver) 3. On what format is the current site hosted? (Ex: NT, UNIX, Apache) |
| 1. Ecommerce 2. Are you using an Ecommerce system now? 3. If so, what are you using? |

# 10. Available technology resources/integration issuers

|  |
| --- |
| 1. Do you have existing system that you expect your Web developer to add to the proposed system? |
| 1. Do you have existing databases that will need to be imported or connected to the proposed system? |
| 1. Do you have existing e-Commerce systems or other tools that the proposed system should be connected to? |

# 11. Budget & Cost estimates

|  |
| --- |
|  |
|  |
|  |
|  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Cost Item** | **QTY** | **Unit Cost** | **Total Cost** | **Maintenance first Years** | **Maintenance 5 years** | **Maintenance in %** |
| Coffee | 24 | ±80 | R1920 (with a ±15% accuracy) |  |  |  |
|  |  |  |  |  |  |  |
| **TOTAL COST** |  |  |  |  |  |  |

# 12. Proposal Evaluation Criteria/ Format for proposals

|  |
| --- |
| Here the Request for Proposal should describe exactly how proposals will be evaluated. It should include a list of criteria that will be reviewed and describe what is suitable for each of the criteria. The more detail that can be included, the more thorough and complete the proposals should be. This RFP template provides an example of the proposal evaluation criteria below. |
| 1. Executive Summary |
| 2. Technical Volume   1. Development process: explain the process you will follow to develop proposed system, including major milestones and evaluation. 2. Address usability standards and testing. 3. Address any important technology information and specifications used in your solution (languages, platform, etc.). |
| 3. Management Volume   1. Organizational structure: communication process; including lines of reporting and any special tools used. Did they educate us on how they will complete our project, the team that will be working on it, and the deliverables that will be provided? 2. Schedule of deliverables; include major milestones and testing proposal. |
| 4. Budget Volume   1. Break down cost by production hours, tools and functionalities. 2. Maintenance and support: identify any costs that should be assumed as part of the site and ongoing costs for maintenance and support we need in the future. 3. Hosting: identify whether we must or are highly encouraged to host with your company. If hosting is provided as an option or requirement, provide pricing options. 4. Training and Style Guide: identify costs to train our staff to use site tools and provide a style guide. 5. Other charge areas: Please identify whether there will be other expenses, consulting fees, future work, etc. to complete this project. |
|  |