



NUUSBULLETIN

JULIE 2023

NEWS BULLETIN

JULY 2023

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MAANDELIKSE PRAATJIE

Maandag 31 Julie 2023 @ 10:00
Die Waenhuis, Jagersbosch

DIE PAD NA ChatGPT

Brian Tennett

ChatGPT is in November 2022 vrygestel aan die algemene publiek, en binne twee maande was daar 'n rekordbrekende 100 miljoen verbruikers. Die groot taalmodel demonstreer grondbrekende vordering in teks/spraak opwekking en menslike interaksie en is tans een van die vinnigste groeiende areas in kunsmatige intelligensie.

Die voorlegging demonstreer die basiese funksionaliteit van ChatGPT en ondersoek toepassings in die sake wêreld. Die historiese ontwikkeling van groot taalmodelle word bespreek saam met sleutel komponente wat deel vorm van hierdie fassinerende tegnologie. Die voordele en uitdagings van hierdie groot stap vorentoe in KI word ook bespreek.

MONTHLY MEETING

Monday 31 July 2023 @ 10:00
Die Waenhuis, Jagersbosch

THE ROAD TO ChatGPT

Brian Tennett

In November 2022 ChatGPT was released to the general public and within 2 months accumulated a record breaking 100 million users. This large language model demonstrates groundbreaking advancement in text/speech generation and human interaction and is presently one of the fastest growing areas of artificial intelligence.

This presentation will demonstrate some basic functionality of ChatGPT and examine current applications in the business world. The historical development of these large language models will be revealed together with key components that form part of this fascinating technology. The benefits and challenges of this major step forward in AI will also be discussed.

Brian Tennett het meer as dertig jaar ondervinding van projekbestuur hoofsaaklik in prosesbeheer en outomatisasie. Hy het 'n graad in Fisika en is 'n geregistreerde Professionele Ingenieur in beide Suid-Afrika en die VK. Sy projek kundigheid dek 'n wye reeks van nywerhede van yster & staal, petrochemies, olie & gas, brouery, FMCG Nywerhede en myne & minerale prosessering. Dit het geleenthede geskep om met sy werk na ander lande te reis, insluitende Kanada, Noorweë en die VK. Sedert aftrede het sy tegnies agtergrond gehelp om 'n instense belangstelling in masjienleer en ander KI toepassings te ontwikkel. Hy geniet dit nog steeds om te reis.

Brian se praatjie en die voorlegging is in Engels.

Besoekers en gaste is welkom by die praatjie

Brian Tennett has over thirty years of project execution experience mainly in the field of process control and automation. He holds a degree in Physics and is a registered Professional Engineer in both South Africa and the UK. His project knowledge covers a wide range of industries from Iron & Steel, Petrochemical, Oil & Gas, Chemical, Brewing, FMCG Industries and Mining & Mineral Processing. This has created opportunities for travel while working in other countries that include Canada, Norway and the UK. Since retiring, his technical background has been helpful in developing a keen interest in machine learning and other AI applications. He still enjoys travelling a lot.

Brian's talk and the presentation will be in English.

Visitors and guests are welcome at the talk.



VORIGE PRAATJIES

Alle vorige praatjies is beskikbaar op ons webtuiste. Ons het ook video opnames van verskeie van ons meer onlangse praatjies. Alles is beskikbaar op:

www.u3astilbaai.org.

Klik op LESINGS – TALKS in die menu bo, en dan op "Vorige Lesings – Previous Talks"

PREVIOUS TALKS

All previous talks are available on our website. We also have video recordings of several of the more recent talks. All can be found on:

www.u3astilbaai.org.

Click on LESINGS – TALKS in top menu, and then on "Vorige Lesings – Previous Talks"



ONS VOËLGROEP WYS HOE ATLASWERK GEDOEN MOET WORD.

'n Artikel gepubliseer in die joernaal "*Citizen Science: Theory and Practice*" deur Karis Daniel en Prof Les Underhill van die Universiteit Kaapstad beskryf die waarde van gestruktueerde sistematiese Atlaswerk soos ingestel deur die U3A Stilbaai Voëlgroep in Hessequa, in vergelyking met ongestruktueerde en ongeorganiseerde opnames in ander strek.

Daniel, KA & Underhill, LG. 2023. *Temporal Dimensions of Data Quality in Bird Atlases: the Case of the Second Southern African Bird Atlas Project*. Citizen Science: Theory and Practice, 8(1): 31, pp. 1–17.

OUR BIRD GROUP SHOWS HOW ATLASING MUST BE DONE.

An article published in the journal "*Citizen Science: Theory and Practice*" by Karis Daniel and Prof Les Underhill of the University of Cape Town describes the importance of structured systematic Atlasing as initiated by the U3A Stilbaai Bird Group in Hessequa, compared to unstructured and unorganised surveys in other regions.

Daniel, KA & Underhill, LG. 2023. *Temporal Dimensions of Data Quality in Bird Atlases: the Case of the Second Southern African Bird Atlas Project*. Citizen Science: Theory and Practice, 8(1): 31, pp. 1–17.

Verlies aan biodiversiteit op land is 'n groot bewaringsprobleem, en om hierdie verlies te bekamp vereis voldoende data om die probleem se omvang te bepaal. Burgerwetenskap (Citizen Science) hou die belofte in van groot hoeveelhede data, maar het ook die uitdaging om te verseker hierdie data waardevol is vir bewaringsnavorsing en dat dit sinvolle aksies tot gevolg het. Die artikel ondersoek die impak van sistematiese veldwerk teenoor ongestruktueerde opnames op die moniterings waarde van data van die Tweede Suid-Afrikaanse Voëlatlas Projek (SAPAB2).

SAPAB2 atlassers werk in 'n ruitenet stelsel om voëllyste te genereer wat deeglike veldwerk verg. Alhoewel waardevol, kan ongestruktueerde veldwerk 'n onvolledige prentjie toon; effektiewe bewarings aksies verg monitering – om die vinger op die pols van plaaslike biodiversiteit te hou deur aanhoudende en sistematiese data versameling. Sistematiese versameling beteken dat patrone soos seisoenale bevolkings tendense en beweging kan gou opgetel word, dit kan wetenskaplikes betyds inlig as daar afwykings is en vinnige optrede beteken. Tog is dit 'n veeleisende protokol en toepassing vereis inagneming van deelnemers se impak en motivering.

Die outeurs het 'n nuwe toenadering om data kwaliteit te meet gebruik om die sistematiese atlaswerk van 'n Burgerwetenskaplike gemeenskap in Stilbaai in die Hessequa Atlasgebied te meet deur die vergelyking van gestruktueerde data versameling teenoor opportunistiese veldopnames. Die gestruktueerde raamwerk is deur Johan van Rooyen van die U3A Stilbaai Voëlgroep ontwikkel deur die toepassing van 'n georganiseerde sistematiese wyse vir voëlopnames in die 75 pentades in die Hessequa Munisipale gebied. Hierdie metode word vergelyk met ander streke in Suid-Afrika waar voëlopnames nie gekoördineer word nie, of slegs sporadies koördineer word.

Hulle bewys dat gestruktueerde data versameling die geldigheid van die atlas data verbeter, en dus die moniterings kwaliteit. Die artikel bespreek die uitdagings om bereikbare doelwitte vir deelnemers te stel, en ondersoek Hessequa se projek struktuur en deelnemers motivering om aanbevelings vir toekomstige projekbestuur te maak.

Biodiversity loss on land is a major conservation problem, and halting this loss requires sufficient data to assess the problem. Citizen Science (CS) promises large quantities of data, but introduces the challenge of ensuring these are valuable to conservation research and can inform meaningful action. This paper contributes to this endeavour, examining the impact of systematic as opposed to unstructured fieldwork on the biodiversity monitoring value of data from the Second Southern African Bird Atlas Project (SABAP2).

SABAP2 "atlasers" work within a fine-scale grid system to generate avian species checklists that are comprehensive at the time of fieldwork. Though valuable, unstructured fieldwork efforts paint an incomplete picture; effective conservation action requires monitoring — keeping a finger on the pulse of local biodiversity through consistent and systematic data collection. Systematic collection allows for the detection of nuanced biological patterns such as seasonal population trends and movements, rapidly alerting scientists to anomalies and galvanizing swift response. It is, however, a demanding protocol, and implementation requires careful consideration of participant impact and motivations.

The authors reviewed a newly developed approach for measuring data quality to examine the systematic atlasing efforts of a Citizen Scientist community in Stilbaai in the Hessequa Atlasing Area, assessing the biodiversity monitoring value of structured data collection versus opportunistic checklists. The structured framework was developed by Johan van Rooyen of the U3A Stilbaai Bird Group by introducing an organised systematic approach to atlasing birds in the 75 pentads in Hessequa Municipal area. This approach is compared to other regions in South Africa where fieldwork has no coordination, or is only sporadically organised.

They found that structured data collection increased validity of atlas data, and thus its monitoring quality. The article discusses challenges in maintaining achievable fieldwork goals for participants, and examine Hessequa's project structure and participant motivations to provide recommendations for future project management.

Die Voorsitter en Komitee van U3A Stilbaai wens Johan van Rooyen en die SABAP2 lede van die U3A Stilbaai Voëlgroep baie geluk met jul belangrike bydrae tot die wetenskap.

The Chairperson and Committee of U3A Stilbaai congratulates Johan van Rooyen and the SABAP2 members of the U3A Stilbaai Bird Group on your important contribution to science.

'n Skakel na die artikel is ook op ons webtuiste: www.u3astilbaai.org/birdgroup/articles.html

A link to the article is also on our website: www.u3astilbaai.org/birdgroup/articles.html



ARTIKEL OOR STILBAAI MUGGIE

Verlede jaar in Januarie het Dr Deon Begemann 'n praatjie oor die Stilbaai Muggie by ons maandelikse vergadering gelever. Die praatjie was oor die muggieplaag wat deur die Stilbaai Muggie veroorsaak word, en die effek wat dit op mens en diere het. Vir die eerste keer is vasgestel waar die muggie broei, en die larwes, papies en eiers word in detail beskryf. Die verspreidingsgebied van die muggie in Hessequa, waar dit endemies is, is gekarteer. Beheermaatreëls teen die muggie word bespreek en 'n sistematiese prioriteitsbenadering tot die beheer van die muggie word voorgestel.

Die inligting is nou as 'n artikel op die LitNet platform publiseer, baie geluk aan Deon.

Begemann, G.J. 2023. *'n Ondersoek na die bionomie, morfologie, verspreiding en beheer van die Stilbaaimuggie (Leptoconops demeilloni [Diptera: Ceratopogonidae])*. LitNet Akademies (Natuurwetenskappe)

» [Klik hier om die artikel oop te maak.](#)

ARTICLE ABOUT STILBAAI MIDGE

Last year in January Dr Deon Begemann gave a talk about the Stilbaai midge at our monthly meeting. The talk was about the midge problem caused by the Stilbaai Midge, and the effect it has on man and animals. For the first time the breeding sites of the midge was established, and the larvae, pupae and eggs are described in detail. The distribution area of the midge in Hessequa, where it is endemic, is mapped. Control measures of the midge is discussed, and a systematic priority approach to control of the midge is proposed.

This information has now been published as an article on the LitNet platform, congratulations to Deon.

Begemann, G.J. 2023. *An investigation into the bionomics, morphology, distribution and control of the Still Bay midge (Leptoconops demeilloni [Diptera: Ceratopogonidae])*. LitNet Academic (Natural Sciences).

» [Click here to open the article.](#)



U3A STILBAAI GROEPE

U3A Stilbaai het verskeie groepe wat aktiwiteite slegs vir lede aanbied. Meer inligting oor die groep aktiwiteite is op ons webtuiste: www.u3astilbaai.org.

Onthou asseblief dat die minimum koste vir deelname aan groep aktiwiteite is R5 per vergadering of uitstappie. R4 hiervan kan vir groep uitgawes aangewend word en word opgeskryf in 'n groepfonds, R1 gaan na algemene U3A fondse. (Nota: alle groepe het nie spesiale fondse nie, hierdie groepe se foie gaan na U3A fondse).

- **Aandele Groep:** Die aandele groep hou gereeld samesprekings waar idees oor die aandele mark uitgeruil word. Kontak Deon Grobler by deongrob123@gmail.com indien u wil aansluit.
- **Astronomie groep:** As u by die groep wil aansluit, kontak Deon by begemannd@gmail.com. Lees meer oor die groep op www.u3astilbaai.org/astronomy.
- **Botaniese Uitstappies:** Hierdie groep bestudeer interessante inheemse plante op uitstappies in die veld. Kontak vir Christina by stilbaai6674@gmail.com as u belangstel.
- **Fotografie Groep:** Enige lid wat belangstel om by die groep aan te sluit kan Richard by

U3A STILBAAI GROUPS

U3A Stilbaai has several groups offering activities to members only. More information about the group activities are on our website: www.u3astilbaai.org.

Please remember that the minimum cost of participating in any of the groups, is R5 per meeting or outing. R4 of this is used for group expenses and is recorded in the group's special fund, R1 goes to general U3A funds. (Note: not all groups have special funds, their group fees goes into U3A funds).

- **Astronomy Group:** If you are interested in joining the group, contact Deon at begemannd@gmail.com Read about the group on www.u3astilbaai.org/astronomy.
- **Bird Group:** The Bird Group involves people interested in birds, as well as co-ordinating the SABAP2 project in Hessequa. Contact Krysia at krysiastenvert@gmail.com if you are interested in joining the group. More information is available on www.u3astilbaai.org/birdgroup.
- **Botanical Walks:** This group studies interesting indigenous plants during walks in the veld. Please contact Christina at stilbaai6674@gmail.com if you are interested.

rwebb01@gmail.com kontak. Meer inligting op www.u3astilbaai.org/photography.

- **Neurowetenskap Groep:** Sien die artikel hieronder oor vergaderings van die groep. Kontak Jenni by jennisharkey@gmail.com indien u by die groep en/of die Zoom praatjies wil aansluit. Lees oor die groep op www.u3astilbaai.org/neuroscience.
- **Stapgroep:** Die groep stap normaalweg op Vrydag oggende. As u by die groep wil aansluit, kontak Karl-Heinz by karl-heinz@wispernet.co.za. Inligting oor die groep is op www.u3astilbaai.org/hiking.
- **Voëlgroep:** Die Voëlgroep betrek mense wat belangstel in voëls, en koördineer ook die SABAP2 projek in Hessequa. Kontak Krysia by krysiastenvet@gmail.com indien u belangstel om by die groep aan te sluit. Meer inligting is op www.u3astilbaai.org/birdgroup.

- **Hiking Group:** The group normally hikes on Friday mornings. If you want to join the group, contact Karl-Heinz at karl-heinz@wispernet.co.za. Information about the group is on www.u3astilbaai.org/hiking.
- **Neuroscience Group:** See the article below re meetings of the group. Please contact Jenni at jennisharkey@gmail.com if you are interested joining the group and/or the Zoom talks. Read more on www.u3astilbaai.org/neuroscience.
- **Photography Group:** Any member interested in joining the group can contact Richard at rwebb01@gmail.com. More information on www.u3astilbaai.org/photography.
- **Shares Group:** The share group holds regular discussions sharing ideas on the share market. Contact Deon Grobler at deongrob123@gmail.com.



2023 MAANDELIKSE PRAATJIES

Die voorlopige program vir praatjies tot die einde van die jaar is as volg (hierdie program kan dalk verander op kort kennisgewing):

- Aug 28: Roy Kretzen gee 'n praatjie oor Etiek.
- Sept 25: Pieter du Toit gesels oor stap het in Nepal.
- Okt 30: Willie van Staden beskryf die Literatuurlandskap.
- Nov 27: Anton van Eeden se onderwerp is: "Die aarde en sterre - feite en flaters"

[Die finale titels en meer oor die onderwerpe sal nader aan die datum van die praatjie verskaf word.]

2023 MONTHLY TALKS

The provisional programme for talks till the end of the year is as follows (this program could change at short notice):

- Aug 28: Roy Kretzen will give a talk on Ethics.
- Sept 25: Pieter du Toit chats about hiking in Nepal.
- Oct 30: Willie van Staden describes the Literature Landscape.
- Nov 27: Anton van Eeden's subject is: "Earth and the stars – facts and fallacies"

[The final titles and subject matter will be provided closer to the date of the talk.]

