Da carreira ao mestrado e do mestrado à carreira

Roberto Santos, PhD

Uma trajetória não linear

Graduação incompleta em Engenharia

Licenciatura em Matemática

Especialização em Java

~10 anos de experiência com desenvolvimento de software

Mestrado















O QUE LEVEI DO MESTRADO



Método

Formular hipóteses, montar experimentos e verificar resultados.



Fundamentos

Base sólida em computação.



Comunicação

Escrever com clareza e defender ideias diante de quem discorda.

NOTTINGHAM, PÓS-DOC

A computação como passaporte entre áreas

O DESAFIO

Doutorado em geografia física e pós-doc em bioinformática, research software engineer em dados de saúde, visão computacional e IA.

O QUE VEIO DO MESTRADO

Métodos computacionais transferíveis e confiança para aprender um domínio novo.

E o ciclo se fecha com outras áreas apresentando problemas que precisam ser resolvidos pela Ciência da Computação

NOTTINGHAM, PÓS-DOC

A computação como passaporte entre áreas


WAGENINGEN
UNIVERSITY & RESEARCH

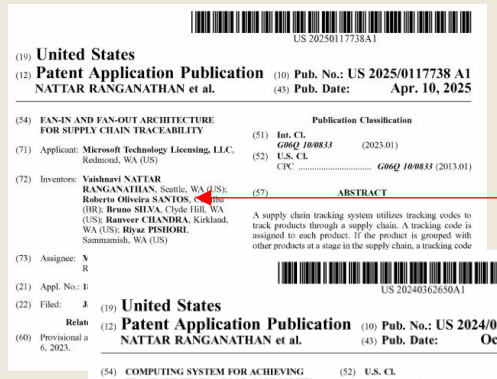
Geospatial standards : An example from agriculture

The Routledge Handbook of Geospatial Technologies and Society

Leibovici, Didier G.; Santos, Roberto; Hobona, Gobe; Anand, Suchith; Kamau, Kiringai et al

https://doi.org/10.4324/9780367855765-3

This publication is made publicly available in the institutional repository of Wageningen University and Research, under the terms of article 25fa of the Dutch Copyright Act, also known as the Amendment Taverne.


US 20250117738A1

(19) United States

(12) Patent Application Publication

NATTAR RANGANATHAN et al.

(10) Pub. No.: US 2025/0117738 A1

(43) Pub. Date: Apr. 10, 2025

(54) FAN-IN AND FAN-OUT ARCHITECTURE FOR SUPPLY CHAIN TRACEABILITY

Publication Classification

(51) Int. Cl. G06Q 10/0833 (2023.01)

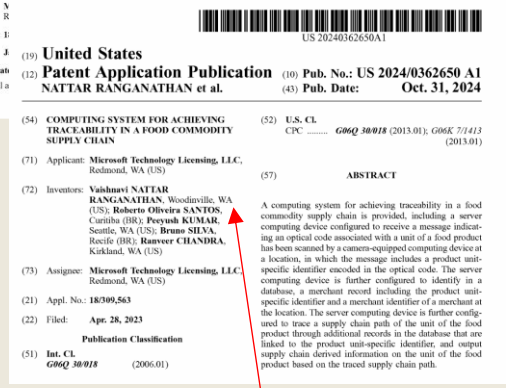
(52) U.S. Cl. CPC G06Q 10/0833 (2013.01)

(71) Applicant: Microsoft Technology Licensing, LLC, Redmond, WA (US)

(72) Inventors: Vaishnavi NATTAR RANGANATHAN, Seattle, WA (US); Roberto Oliveira SANTOS, Curitiba (BR); Bruno SILVA, Clyde Hill, WA (US); Ranveer CHANDRA, Kirkland, WA (US); Riyaz PISHORI, Sammamish, WA (US)

(57) ABSTRACT

A supply chain tracking system utilizes tracking codes to track products through a supply chain. A tracking code is assigned to each product. If the product is grouped with other products at a stage in the supply chain, a tracking code


US 20240362650A1

(19) United States

(12) Patent Application Publication

NATTAR RANGANATHAN et al.

(10) Pub. No.: US 2024/0362650 A1

(43) Pub. Date: Oct. 31, 2024

(54) COMPUTING SYSTEM FOR ACHIEVING TRACEABILITY IN A FOOD COMMODITY SUPPLY CHAIN

(52) U.S. Cl. CPC G06Q 30/018 (2013.01); G06K 7/1413 (2013.01)

(71) Applicant: Microsoft Technology Licensing, LLC, Redmond, WA (US)

(72) Inventors: Vaishnavi NATTAR RANGANATHAN, Woodinville, WA (US); Roberto Oliveira SANTOS, Curitiba (BR); Peeyush KUMAR, Seattle, WA (US); Bruno SILVA, Recife (BR); Ranveer CHANDRA, Kirkland, WA (US)

(57) ABSTRACT

A computing system for achieving traceability in a food commodity supply chain is provided, including a server computing device configured to receive a message indicating an optical code associated with a unit of a food product has been scanned by a camera-equipped computing device at a location, in which the message includes a product unit-specific identifier encoded in the optical code. The server computing device is further configured to identify in a database, a merchant record including the product unit-specific identifier and a merchant identifier of a merchant at the location. The server computing device is further configured to trace a supply chain path of the unit of the food product through additional records in the database that are linked to the product unit-specific identifier, and output supply chain derived information on the unit of the food product based on the traced supply chain path.

(73) Assignee: Microsoft Technology Licensing, LLC, Redmond, WA (US)

(21) Appl. No.: 18/309,563

(22) Filed: Apr. 28, 2023

Publication Classification

(51) Int. Cl. G06Q 30/018 (2006.01)


Bioinformatics, 38(4), 2022, 1133–1135

https://doi.org/10.1093/bioinformatics/btab780

Advance Access Publication Date: 15 November 2021

Applications Note

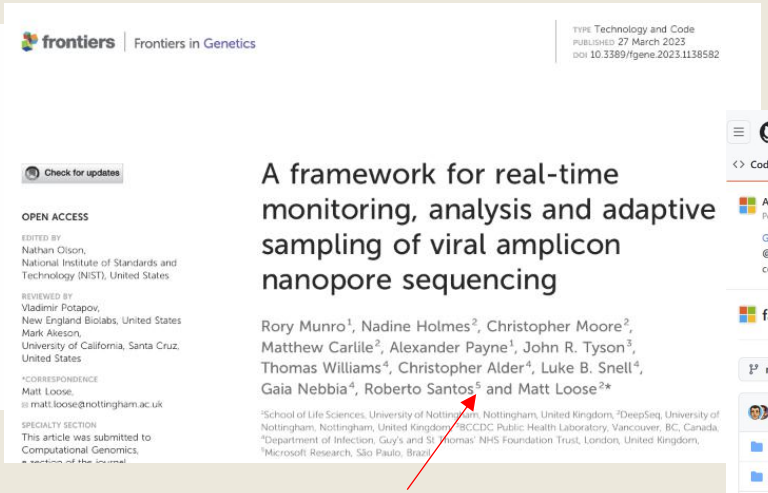
OXFORD

Sequence analysis

minoTour, real-time monitoring and analysis for nanopore sequencers

Rory Munro[1,†], Roberto Santos[1,2,†], Alexander Payne[1], Teri Forey[1], Solomon Osei[3], Nadine Holmes[4] and Matthew Loose [1,4,*]

[1]School of Life Sciences, Queens Medical Centre, University of Nottingham, Nottingham NG7 2UH, UK, [2]Microsoft Research, São Paulo, SP 04543-907, Brazil, [3]Digital Research Service, Jubilee Campus, University of Nottingham, Nottingham NG8 1BB, UK and [4]DeepSeq, School of Life Sciences, Queens Medical Centre, University of Nottingham, Nottingham NG7 2UH, UK


frontiers | Frontiers in Genetics

TYPE Technology and Code

PUBLISHED 27 March 2023

DOI 10.3389/fgene.2023.1138582

Check for updates

OPEN ACCESS

EDITED BY
Nathan Olson,
National Institute of Standards and Technology (NIST), United States

REVIEWED BY
Vladimir Potapov,
New England Biolabs, United States
Mark Akeson,
University of California, Santa Cruz, United States

*CORRESPONDENCE
Matt Loose,
matt.loose@nottingham.ac.uk

SPECIALTY SECTION
This article was submitted to Computational Genomics,

A framework for real-time monitoring, analysis and adaptive sampling of viral amplicon nanopore sequencing

Rory Munro[1], Nadine Holmes[2], Christopher Moore[2], Matthew Carlile[2], Alexander Payne[1], John R. Tyson[3], Thomas Williams[4], Christopher Alder[4], Luke B. Snell[4], Gaia Nebbia[4], Roberto Santos[5] and Matt Loose[2]*

[1]School of Life Sciences, University of Nottingham, Nottingham, United Kingdom, [2]DeepSeq, University of Nottingham, Nottingham, United Kingdom, [3]BCCDC Public Health Laboratory, Vancouver, BC, Canada, [4]Department of Infection, Guy's and St Thomas' NHS Foundation Trust, London, United Kingdom, [5]Microsoft Research, São Paulo, Brazil


JOURNAL OF MEDICAL INTERNET RESEARCH

Jefferson et al

Original Paper

A Hybrid Architecture (CO-CONNECT) to Facilitate Rapid Discovery and Access to Data Across the United Kingdom in Response to the COVID-19 Pandemic: Development Study

Emily Jefferson[1], BSc, PhD; Christian Cole[1], BSc, PhD; Shahzad Mumtaz[1], BSc, MCS, PhD; Samuel Cox[2], MMath, PhD; Thomas Charles Giles[2], BSc, PhD; Sam Adejumo[2], MSc; Esmond Urwin[2], BEng, MSc, PhD; Daniel Lea[2], BSc, MSc; Calum Macdonald[3], BSc, MPhys, PhD; Joseph Best[2,4]; Erum Masood[1], BE, MSc; Gordon Milligan[1], BSc, MSc; Jenny Johnston[1]; Scott Horban[1], BSc; Ipek Birced[1], BSc, BA, MSc; Christopher Hall[1], BSc; Aaron S Jackson[1], BSc, PhD; Clare Collins[2], BA; Sam Rising[2], BSc; Charlotte Dodsley[2]; Jill Hampton[1], BA; Andrew Hadfield[2], BSc; Roberto Santos[2], PhD; Simon Tarr[2], PhD; Vasiliki Panagi[2], BSc, MSc; Joseph Lavagna[2], BSc, MSc; Tracy Jackson[3], BA, MSc, PhD; Antony Chuter[5]; Jillian Beggs[1], BSc; Magdalena Martinez-Queipo[6], DipNur, RN, BSc, MClinRes; Helen Ward[7], PhD; Julie von Ziegenweidt[8,9]; Frances Burns[10], BA, PhD; Joanne Martin[11], BS, MA, MB, PhD; Neil Sebire[12], MBBS, BClinSci, MD; Carole Morris[13], BSc; Declan Bradley[14,15], PhD; Rob Baxter[16], BSc, MSc, PhD; Anni Ahonen-Bishopp[17], Valdes[19], PhD; Benjamin Ollivere[19], Ch, DPhil; Stephanie Gallant[18], BN, Connell[24], BM BCh, MA, PhD; Kate ele Di Angelantonio[28,29,30,31,32], MSc, Gracie Semple[33,34], BSc, BM, BCh, vies[7], MB, BChir, MPH, PhD; John ning[39], BA; Linda Power[40]; Thomas is Orton[44], BA, MSc; Iain Pierce[45,46], Gillson[49], BSc; Matthew Whitaker[7], Susheel Varma[4], BEng, MSc, MBA, BA, MB, MSc, MD; Aziz Sheikh[51],

ity of Dundee, Dundee, United Kingdom

microsoft / farmvibes-ai

Type / to search

Code Issues 30 Pull requests 14 Agents Discussions Actions Projects Security and quality Insights

Announcement

Posted to microsoft on Oct 13, 2026

GitHub Action pinning required by December 4th: Microsoft will enforce full-length commit SHA pinning across organizations. Workflows using mutable refs (like @v4 , @main , @latest) will no longer run. Merge action-pinning PRs, use tools like pinact or remediate manually. Details and remediation steps in link, ask your MS contact if you cannot access.

farmvibes-ai Public

Unwatch 37 Fork 184 Starred 901

main Branches Tags Go to file Code

About

FarmVibes.AI: Multi-Modal GeoSpatial ML Models for Agriculture and Sustainability

microsoft.github.io/farmvibes-ai/

agriculture ai geospatial geospatial-analytics multi-modal remote-sensing stac sustainability weather

Dan Fiedler (danfiedler-msft) and Renato L. de F. Cunha (renatolfc) P 10670e · last month 48 Commits

.devcontainer	Release dev to main branch (#215)	2 years ago
.github	Pin GitHub Actions to full-length commit SHAs (...	last month
docs	Modernize infrastructure tooling (#255)	2 months ago
notebooks	Release dev to main branch (#215)	2 years ago

MICROSOFT

Pesquisa aplicada em escala

O DESAFIO

IA para agricultura no FarmVibes.AI e, depois, RAG e grounding no Microsoft Copilot.

O QUE VEIO DO MESTRADO

Rigor na avaliação: tomada de decisão baseada em dados e experimentação.

SE EU TIVESSE QUE RESUMIR

As ferramentas mudam. O jeito de pensar fica.

Nenhuma das tecnologias que uso hoje existia quando defendi a dissertação.

PARA QUEM ESTÁ NO PROGRAMA HOJE OU ESTÁ PENSANDO EM ENTRAR

Algumas sugestões (mas leia com uma pitada de sal)

1 **Publique e mostre**

Artigo, código aberto, apresentação: o trabalho precisa ser visto.

2 **Converse com outras áreas**

Os problemas mais interessantes estão nas fronteiras.

3 **Escreva código de verdade**

Versionado, testado, reproduzível. Isso conta muito fora da academia.

4 **Aprenda inglês cedo**

Ele abriu Nottingham e a Microsoft para mim.

5 **Colabore, colabore, colabore**

Procure colaborar com colegas, outros grupos de pesquisa e empresas ou outros parceiros. Encontre o nicho onde você pode contribuir e criar uma marca pessoal.

OBRIGADO

Perguntas?

Obrigado ao programa, aos professores e ao(à) [orientador(a)] que tornaram essa trajetória possível.