# Jonathan M. Vance, Ph.D.

thejonathanvance@gmail.com

#### **OVERVIEW**

- PhD, Computer Science, UGA, 2023
- Research Area: AI/Machine Learning in Precision Agriculture, Time Series Forecasting
- 10+ years software engineering
- 20+ years web development and consulting
- Programming Specialties: Python, Machine Learning, Neural Nets, Cloud, Java/J2EE, Mobile, Full Stack

#### PROFESSIONAL HISTORY

## University of Georgia School of Computing, August 2023 to Present

Lecturer - Software Engineering, Discrete Mathematics, Introduction to Programming with Java

University of Georgia Center for Applied Genetic Technologies, May 2023 to August 2023 Student Researcher

University of Georgia Computer Science Department, January 2023 to May 2023 Teaching Assistant – UNIX System Programming

University of Georgia Computer Science Department, August 2022 to December 2022 Instructor of Record – Topics in Computing

University of Georgia Computer Science Department, May 2022 to August 2022 Teaching Assistant – Computing, Ethics, & Society

University of Georgia Computer Science Department, January 2022 to May 2022 Instructor of Record – Topics in Computing

University of Georgia Computer Science Department, January to August 2019, August to January 2022 Teaching Assistant – Computing, Ethics, & Society

University of Georgia Computer Science Department, May 2021 to August 2021 Instructor of Record – Foundations for Informatics and Data Analytics

# University of Georgia College of Engineering, August 2019 to August 2020 Research Assistant

- Mobile app development for iPhone, Android, etc.
- Geolocation data clustering & mapping research and implementation
- Image classification with convolutional neural networks (CNNs), machine learning techniques
- AWS, Google Cloud deployment & administration
- Fortune 500 Sponsors, United Nations consulting

# University of Georgia College of Veterinary Medicine, July 2017 to December 2018 Application Analyst Specialist

• J2EE software used at universities throughout the U.S.

• Java, Groovy, Oracle, HTML, CSS, Agile, Git, full stack development

# University of Georgia Terry College of Business, October 2014 to July 2017 Application Analyst Associate

- Developed, maintained Terry Course Evaluation, Personnel Directory, and Course Directory
- Developed applications to support college, e.g.: web-services based synchronization, mail merge, etc.
- Python, C# .NET, SQL Server, Web Services, Git, Javascript

## DigitasLBi, June 2014 to August 2014

### **Software Engineer**

- C# .NET, HP Teamsite CMS, XML, SQL Server, HTML, CSS, JavaScript, Bootstrap
- Enterprise Level software development for fortune 500 bank SunTrust.com, desktop and mobile, with international Agile team of approximately 20

#### Tech Safari. March 2012 to June 2014

## Senior Java/J2EE Developer

- Java/J2EE, Oracle, SOAP web services, Eclipse
- Team Lead, Enterprise web application full stack development for fortune 500 company CenturyLink, 3rd largest telecommunications company in U.S.

## Jonathan Vance Multimedia Development, Ongoing

- Development and consulting for private clients including:
  - Edward Vance Financial Accounting Scripts (2020, 2021), vanceinvestments.com (2010) ○
     RL Edmondson Vance (artist) RebeccaEdmondson.com (2020 2021)
  - Bond Creative Group Responsive UI for mobile, Bootstrap, Expression Engine CMS (2014) 
     China Hydroelectric Liferay CMS (2010)
  - University of Georgia School of Ecology Coweeta Interactive Mapping System LAMP,
     Jquery (2009)

## SAI Global/Compliance 360, November 2011 to February 2012

## **Software Engineer**

 C#.NET Enterprise web application full stack development for industry leading healthcare governance SAAS system

#### RMCI Inc., May 2010 to November 2011

## .NET Developer

- VB.Net, Enterprise web application full stack development for USAJOBS.gov, 5 million+ users
- Promoted from Junior Developer to Developer within first few months; received official recognition from top leadership
- Scrum Alliance Certified Scrum Master Certification

#### **PUBLICATIONS**

- Author "Data Synthesis for Alfalfa Biomass Yield Estimation." Al 4, no.1 (2022) 2022:1-15.
- Author "Alfalfa Biomass Yield Prediction Using Machine Learning" Conference Poster, Phenomics and Plant Robotics Center Symposium, Sept. 2021
- Author, IN PRESS, "Comparing Machine Learning Techniques for Alfalfa Biomass Yield Prediction."
   Transactions on Computational Science and Computational Intelligence, (2021).

- Co-author, "Using Machine Learning and Feature Selection for Alfalfa Yield Prediction." *Al* 2, no. 1 (2021): 71-88.
- Author, "Image Recognition And the Marine Debris Tracker App" Conference Poster, *Advancing Informatics in Government and Industry*, Nov. 2019

# EDUCATION

- Ph.D., Computer Science, University of Georgia, 2023
- BS, Computer Science, University of Georgia, 2009