Guilherme Oliveira

Contact Information

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E-mail:	ghophp@gmail.com
Born:	29 September 1991
Civil Status:	Single
Nationality:	Brazilian
Portfolio:	ghophp.github.io

Keywords

problem solver, fast learner, agile integrant, language agnostic, database normaliser, rest advocate

Core Competencies

- Rapid understanding of new code bases and new technologies in general.
- Requirement analysis and breakdown, software architecture and design.
- Properly code for multiple platforms in multiple programming languages.
- A loyal team member devoted to achieve the goals together.
- Curious and adaptive learner always seeking new challenges.

Result Accomplished

- Co-founder of a business providing optical character recognition services for APM Terminals.
- Helped big corporations (such as Votorantim Group) to connect with their customers though out the development and release of iOS and Android applications.
- Contributed for open-source project and pushed inside private companies for a more active and professional open-source presence.
- Directly involved in successfully implementing CI/CD processes with micro-services architecture.
- Top grades and final paper award that guaranteed immediate ingression for Master's Degree at highly disputed federal institution.

Awards

- Best Final Paper of University 2013 (Software Prototype to Auxiliate and Stimulate the Corporal Stretching Process) - Github Source

Professional Experience

Arizona State University, Tempe, AZ

Assistant Professor **August 2015 (upcoming)**

- Joint Appointment:
  - School of Computing, Informatics, and Decision Systems Engineering

  - School of Sustainability
- Graduate faculty in Industrial Engineering/Operations Research, Sustainability, and Animal Behavior.
- Interdisciplinary laboratory focus on decision making and organization.

Associate Research Scientist **August 2014 to present**
Postdoctoral Scholar **July 2012 to August 2014**

- Supervisor: Professor Stephen C. Pratt
- Novel application of sophisticated quantitative analysis and modeling techniques to animals, with social insects as a particular focus.
- Development of new algorithms for robotics and other autonomous systems based on animal behavior, with focus on distributed decision making.
- Supervision of graduate and undergraduate students in engineering, computer science, and biology in tasks related to biological analysis and modeling as well as technological bio-mimetic design.

The Ohio State University, Columbus, OH

Postdoctoral Researcher **September 2010 to June 2012**

- Funding: National Science Foundation Cyber-Physical Systems (ENG, ECCS)
  - "Autonomous Driving in Mixed-Traffic Urban Environments" (grant
  - Supervisor (co-PI): Professor Paolo A. G. Sivilotti
  - PI: Professor Ümit Özgüner
- Development of new approaches to software verification in the context of hybrid-state and hybrid-time dynamical systems.
- Supervision of student design project for novel vehicle-to-vehicle communications systems to assist in adaptive cruise control.

National Instruments, Austin, TX

Hardware R&D Intern for Multifunction DAQ **June 2003 to September 2003**

- Designed final verification test fixture for use with STC2 MIO products.
- Designed and executed study of the effect of varying burn-in time on long-term drift of common industry voltage references.

Hardware R&D Intern for Multifunction DAQ **June 2002 to September 2002**

- Designed and performed validation tests for 16-bit 800 kHz NI-6120 SMIO DAQ.
- Designed high-quality source to use with NI-5411 arbitrary function generator.

IBM Network Storage, Research Triangle Park, NC

Core Systems Software Developer for FlexNAS **June 2001 to September 2001**

- Designed and implemented highly available multihop communications subsystem.
- Participated in software development of various vital box services.

CallTech Communications, Columbus, OH

Information Technology Systems Engineer **June 1997 to May 2001**

- Responsible for the acquisition, setup, and administration of all hardware and software systems supporting NetWalk Internet service and web presence provider.
- Designed and implemented state-of-the-art open-source highly available load-balancing system supporting thousands of virtual servers.
- Developed call-center software for clients such as CompuServe, AOL, and Priceline.

MegaLinx Communications, Dublin, OH

Web Developer and Support Representative **June 1995 to May 1997**

- Produced web content for commercial clients.
- Assisted in administration of UltraSPARC, x86, 680x0, and PowerPC systems.
- Developed multi-platform open-source file-sharing solution.
- Provided technical support for Internet and web presence customers.

PROGRAMMING SKILLS

strong Golang, PHP, SQL, JavaScript, HTML, CSS & Java

moderate Python, Scala, C++, ActionScript 3 & Regular Expressions

have used Objective-C,Shell scripting, C#, AutoLISP & LaTeX

CONCEPTS KNOWLEDGE

rest, database normalisation, github flow, git flow, micro-services & monolith architecture, continuous integration & deployment, refactoring strategies, system design, agile & kanban methodologies, message systems, protocols

FRAMEWORKS & TOOLS

strong git, Sublime Text, Terminal, RabbitMQ, Redis, Memcached, MySQL, Travis, AngularJS, GruntJS, Bower, Martini, Android SDK, Zend, Symphony & Doctrine

moderate BuildBot, MongoDB, EC2, RDS, OpsWorks, Play Framework, NodeJS, Python Twisted & Cyclone, Socket.io, DNS, Unix, Firewall & Qt

have used Hibernate, Akka, ReactJS, BackboneJS, Realm.io, XCode & Elastic Beanstalk

Natural Languages

Portuguese (mother tongue), English (fluent), Spanish (moderate) & German (beginner).

Hobbies and Interests

- Read about all kind of subjects.
- Travel and disconnect from routine for certain periods.
- Cook and bake. Knead a good dough is a therapy for me.
- Run and practice team sports (volley, football and basketball).

References

Dr. Stephen C. Pratt (e-mail: stephen.pratt@asu.edu; phone: +1-480-727-9425)

- Associate Professor, School of Life Sciences, Arizona State University
  - ◇ School of Life Sciences, PO Box 874501, Tempe, AZ 85287-4501
  - ⋆ *Dr. Pratt is my current postdoctoral supervisor.*

Dr. Spring M. Berman (e-mail: Spring.Berman@asu.edu; phone: +1-480-965-4431)

- Assistant Professor, Mechanical and Aerospace Engineering, Arizona State University
  - ◇ School for Engineering of Matter, Transport, and Energy, PO Box 876106, Tempe, AZ 85287-6106
  - ⋆ *Dr. Berman is collaborator on my bio-mimicry work.*

More Information

More information can be found at http://ghophp.github.io/.