# Pedro Paulo Oliveira Jr

Rio de Janeiro, Brazil +5521973171987 ppaulojr@gmail.com http://www.netfilter.com.br

My first contact with a computer was when I was 10 and got a Sinclair ZX81 and started programming in Basic. All my family has an IT background so it was kind of easy to figure out which career to follow.

I love programming and using computers as a tool to solve scientific problems as well

I got a **PhD in Medicine** and a **MsC in Engineering**.

I love the iOS platform, I believe that Apple and Microsoft are the most important IT companies in the world.

**Technical Skills** 

**Likes:** objective-c, c++, c, opengl-es, ios

Dislikes: netbeans, cobol

#### **Experience**

#### Jedi Team Member - CipherHealth, New York, NY, USA

March 2015 - Current

ios, iphone, encryption, medical, scrum, objective-c, swift, afnetworking, hl7, single-sign-on

Responsible for a large iOS Application that provides rounding solutions for Care Providers to improve Hospital Consumer Assessment of Healthcare Providers and Systems (**HCAHPS**).

- Core Data
- UlKit
- Human Interface Guidelines
- · Image Processing
- Sound Processing
- Data Visualization for BigData Streams
- HL7 Message processing
- AFNetworking and Asynchronous Core Data

Working with a multi-cultural, remote team with 40+ members.

**Director of Software Development** – Netfilter, Rio de Janeiro, RJ, Brazil c++, python, lua, firewall, squid, ai, objective-c, ios, android, machine-learning

March 2003 - Current

Lead all software development team

#### Projects:

- Web content filter for PC/Network/ISP
- · Blacklist database creation and automatic maintenance.
- iOS Apps 50 apps for our company and 10 apps for third-party
- Implementation of customized Netfilter solutions to large telecom carriers.
- Project Manager for Appliance Hardware development
- · Managed international operations

More than  ${\bf 20}$  keynotes speechs in events where content filtering and Network processing was in focus.

More than 200 talks about Education and new technologies

Participated in two Senate/House of Representative Hearings about technology.

#### co-Founder - cerebralvol.com

December 2013 - Current

amazon-web-services, amazon-ec2, gwt, neuroscience, python, machine-learning

#### **Chief Architect**

#### **Publications**

"Use of SVM Methods with Surface-Based Cortical and Volumetric Subcortical Measurements to Detect Alzheimer's Disease" - Oliveira Jr. PPM, et al. DOI: 10.3233/JAD-2010-1322

"Can neuroimaging be used as a support to diagnosis of borderline personality disorder? An approach based on computational neuroanatomy and machine learning", Sato, JR, Oliveira Jr. PPM et al. DOI: 10.1016/j.jpsychires.2012.05.008

**Senior System Analist** – Heart Institute, INCOR, São Paulo, SP, Brazil lua, c, c++, xml, cgi, firewall, medical, performance, embedded, hl7

2000 - 2003

Leading the development of medical software for the hospital In charge of bedside patient monitoring software

- Rebelo, Marina; OLIVEIRA JUNIOR, P. P. M.; Gutierrez, Marco Antonio; Pilon, Paulo; Tachinardi, Umberto. vMon-mobile: experiência na integração de monitores de sinais vitais ao PEP utilizando tecnologia de redes sem fio. In: VIII Congresso Brasileiro de Informática em Saúde,, 2002, Natal. Anais do VIII Congresso Brasileiro de Informática em Saúde,, 2002.
- Rebelo, Marina; Tachinardi, Umberto; Gutierrez, Marco Antonio; Pilon, Paulo; OLIVEIRA JUNIOR, P. P. M.
  Presenting Real-Time Monitoring Data on Handheld Computers Using Wireless Networks. In: TEPR2002, 2002, San Francisco. Proceedings of TEPR2002, 2002.
- OLIVEIRA JUNIOR, P. P. M.; Rebelo, Marina; Pilon, Paulo; Gutierrez, Marco Antonio; Tachinardi, Umberto. vMon-mobile provides wireless connection to the electronic patient record. In: SPIE International Symposium Medical Imaging, 2002, San Diego. Proceedings of SPIE International Symposium Medical Imaging, 2002. v. 4685. p. 438-445.
- Tachinardi, Umberto; Rebelo, Marina; OLIVEIRA JUNIOR, P. P. M.; Pilon, Paulo. Real time information from bedside monitors as part of a web-based patient record. In: AMIA Symp, 2001, Washington, DC. Proc AMIA Symp, 2001. p. 691-695.

#### Junior System Analist - TecGraf - PUC-Rio

1996 – 1999

lua, c, c++, opengl, directx, computer-vision, volume-rendering, mpi

- Software development for MRI and fMRI
- · Software development in Lua for Petrobras
- Dicom viewer implementation
- Cluster development in PVM/MPI

I've worked with the creators of Lua programming language

 OLIVEIRA JUNIOR, P. P. M.; GATTASS, Marcelo. Detecção de ativação em ressonância nuclear magnética funcional do cérebro. In: SIBGRAPI, 1997, Campos do Jordão. Proceedings of the X SIBGRAPI'97 Conference, 1997. v. 10.

# Education

#### PhD Medicine - USP

2007 - 2008

ai, svm, neuroscience, machine-learning, supercomputers

Two papers published in Major journals One original method to detect Alzheimer Disease

- OLIVEIRA JUNIOR, P. P. M.; Ricardo Nitrini; BUSATO, GERALDO; Buchpieguel, Carlos; SATO, JOÃO RICARDO; AMARO JUNIOR, EDSON. Use of SVM Methods with Surface-Based Cortical and Volumetric Subcortical Measurements to Detect Alzheimer's Disease. Journal of Alzheimer's Disease, v. 19, p. 1322, 2010.
- OLIVEIRA JUNIOR, P. P. M.; Valente, Kette Dualibi; Shergill, Sukhwinder S.; Leite, Claudia da Costa;
  Amaro Jr, Edson. Cortical Thickness Reduction of Normal Appearing Cortex in Patients with Polymicrogyria.
  Journal of Neuroimaging, v. 20, p. 46-52, 2010.

#### MSc Computer Graphics - PUC-Rio

1997 – 1999

lua, opengl, computer-vision, c++, c, volume-rendering, asic, gpu

One original algorithm to speed up volume rendering Full-A grade

**OLIVEIRA JUNIOR, P. P. M.**; GATTASS, Marcelo . A Virtual Endoscopic System for Non-Invasive Bronchoscopy. In: 13th Brazilian Symposium on Computer Graphics and Image Processing, 2000, Gramado (RS), Brazil. 13th Brazilian Symposium on Computer Graphics and Image Processing, 2000. v. 13.

#### Computer Engineer - PUC-Rio

1993 - 1997

c, pascal, uml, c++, prolog, verilog, vhdl, ai, statistics, discrete-mathematics, algorithm-design, genetic-algorithms

- 7th highest score of the university at admission
- · 1st highest score at class graduation
- Average grade 9/10 (GPA: 3.6)

#### **Projects & Interests**

#### Stack Overflow - http://stackoverflow.com/users/417415

August 2010 - Current

Written 58 answers. Active in ios.

 $\label{lem:com/Netfilter-Com/PopulationClock} \begin{tabular}{ll} GitHub - PopulationClock - $\underline{\mbox{https://gitHub.com/Netfilter-Com/PopulationClock}} \\ python, objective-c, core-animation \end{tabular}$ 

February 2016 - May 2016

Population Clock is an iOS tool for learning about geography and demographics.

Main developer

#### App Store - iSurf BrainView - http://itunes.apple.com/us/app/isurf-brainview/id381072423?mt=8

iSurf BrainView is a Brain MRI tutor based on the MRI automatic segmentation produced by FreeSurfer.FreeSurfer is a software package developed by investigators at the Athinoula A....

main developer layout creation

#### App Store - Crazy Valet - http://itunes.apple.com/us/app/crazy-valet/id393158294?mt=8

Read reviews, get customer ratings, see screenshots, and learn more about Crazy Valet on the App Store. Download Crazy Valet and enjoy it on your iPhone, iPad, and iPod touch.

level design contributed with programming

GitHub - barcode-proof-of-concept - https://github.com/ppaulojr/barcode-proof-of- March 2015 - January 2016 concept

# Proof of concept of the barcode reader It uses only native iOS libraries and it works on iOS 7+

Main developer

# ${\bf Git Hub \, \cdot \, NFB} e eminder Helper \, - \,$

November 2014 - January 2015

https://github.com/ppaulojr/NFBeeminderHelperobjective-c, oauth

Helper Class to Integrate Beeminder in any iOS App

Main dev

### $\textbf{GitHub-CrazyCorrelation} - \underline{\text{https://github.com/ppaulojr/CrazyCorrelation}}$

April 2015

Code for the blog crazycorrelation.com

Author

# GitHub - zung - https://github.com/ppaulojr/zung

December 2014 - January 2015

Zung Depression Scale - iOS App to teach ObjC

Main dev

# $\textbf{GitHub-tennis\_atp} - \underline{\text{https://github.com/ppaulojr/tennis\_atp}}$

March 2015 - September 2015

python, pandas, sql

ATP Tennis Rankings, Results, and Stats

Contributor, Samples Writer

# $\textbf{GitHub-adni} - \underline{\text{https://github.com/ppaulojr/adni}}$

December 2014 - April 2015

Alzheimer's Disease Neuroimaging Initiative (ADNI)

Developer

#### **GitHub - atp-followers** – <a href="https://github.com/ppaulojr/atp-followers">https://github.com/ppaulojr/atp-followers</a>

ATP player's Twitter followers count

Creator

# $\textbf{GitHub-NFA} \textbf{larmLibrary} - \underline{\text{https://github.com/Netfilter-Com/NFA} \\ \textbf{larmLibrary}$

August 2015

objective-c, push-notification, apple-push-notifications

iOS Alarm Managing Library

Author

Itunes Apps - http://itunes.apple.com/us/artist/netfilter/id365306441

objective-c, c, c++, lua

More than 40 Apps in AppStore with 3 million downloads

Development manager

Power Berry Jump - Free iOS game - http://www.youtube.com/watch?v=tEJyYdcTEL4

objective-c, cocos2d-iphone, c++, opengl-es

Power Berry Jump is a new game for your iphone! Have fun!

Software Manager

#### Writing

Handbook of Imaging the Alzheimer Brain – <a href="http://www.amazon.com/Handbook-Imaging-Alzheimer-Brain-Rosen/dp/1607507927%3FSubscriptionld%3DAKIAIIBINOD46VC3JCLQ%26tag%3Dstackoverfl08-20%26linkCode%3Dxm2%26camp%3D2025%26creative%3D165953%26creativeASIN%3D1607507927</a>

Escrever código porco ajuda a ganhar este prêmio – <a href="http://www.zeletron.com.br/2011/11/escrever-codigo-porco-ajuda-a-ganhar-este-premio.html">http://www.zeletron.com.br/2011/11/escrever-codigo-porco-ajuda-a-ganhar-este-premio.html</a>

The International Obfuscated C Code Contest é um concurso em que vence aquele que escrever o código C mais difícil de se ler e que faça uma coisa

Adding iAd in Phonegap Apps - http://www.zeletron.com.br/2010/07/adding-iad-in-phonegap-apps.html

How to add iAd to PhoneGap app: (Este post está em inglês para ajudar os desenvolvedores PhoneGap em todo mundo) Step 1) Modify the following function

#### Desenvolvendo para IPhone sem Objective-C (Parte 2/3) -

http://www.zeletron.com.br/2010/04/desenvolvendo-para-iphone-sem-objective-c-parte-23.html

Ok, eu já percebi que você não comprou meu app na loja da Apple, mas tudo bem, você sabe que não escrevo isto por dinheiro e que você não precisa me

Stuxnet o vírus mais sofisticado da história – <a href="http://bugsa.blogspot.com/2010/09/stuxnet-o-virus-mais-sofisticado-da.html">http://bugsa.blogspot.com/2010/09/stuxnet-o-virus-mais-sofisticado-da.html</a>

Crosspost: Zeletron

# Pensamentos sobre recrutamento de pessoas espertas | Zeletron –

http://www.zeletron.com.br/2012/11/pensamentos-sobre-recrutamento-de-pessoas-espertas.html

How to hire a good programmer

Há algum tempo escrevi sobre o drama de contratar programadores aqui no Brasil. Meu drama continua, estou compilando o melhor (o pior) dos currículos.

Of Neighbors and Wounds: English and Spirituality - Ethika Politika - <a href="https://ethikapolitika.org/2015/04/01/of-neighbors-and-wounds-english-and-spirituality/">https://ethikapolitika.org/2015/04/01/of-neighbors-and-wounds-english-and-spirituality/</a>

It's not unusual that the Anglophone media has problems parsing Pope Francis. This problem relates in part to a lack of vocabulary to express spiritual concepts or translate accurately what was said...

Code and Catholicism: Beeminding Praying and Integrating Beeminder on iOS | Beeminder Blog – <a href="http://blog.beeminder.com/rosary/">http://blog.beeminder.com/rosary/</a>

Last week Leah Libresco blogged about beeminding rituals. This week we're continuing the Catholic theme with a guest post by veritable Rena...

Fifty years ago the Catholic Church witnessed the blooming of a theological movement known as Liberation Theology. Drawing on the social concerns of the Church, those scholars created a blend of Christianity with Marxism that explain some current pastoral phenomena in Latin America.

Tools First Computer: TK85 (Sinclair ZX81)

Favorite Editor: XCode