

Curriculum Vitae: Rafael M. Estepa Alonso,



Born in Cordoba (Spain) on February 20th, 1973. Spanish citizen
Married, three children.

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1. Education

University of Seville, Spain	PhD (Telematics Engineering)	2002
University of Seville, Spain	Telecommunications MS Engineer	1998

2. Employment

2.1. University of Seville	Associate Professor of Telecommunication Engineering	2006-todate
University of Seville	Assistant Professor of Telecommunication Engineering	1999-2006
University of Seville	Vice-Dean of the Engineering School	2007-2010

2.2. Visiting Professor at the CEMAT (Center of Math and Applications) of the Technical University of Lisbon (IST).(3 months, 2005)

2.3. Alcatel, Data Networking Engineer: 1997-1999

3. Research Interests

- Voice Over IP (Quality of Service, Traffic Dimensioning, Energy).
- Wireless network energy efficient design.
- Wired network topology design.

4. Research Publications

4.1. Journal Papers co-author in:

- *Energy efficiency and Quality of Service optimization for CBR real-time applications in 802.11 networks.* Wireless Communications and Mobile Computing. ACCEPTED TO BE PUBLISHED IN 2012.
- *A Productivity-Based Approach to LAN Topology Design.* IEEE Communications Letters. Vol. 15. Num. 3. 2011. Pag. 349-351

- *A Productivity Oriented Methodology for Local Area Network Design in Industrial Environments*. Computer Networks-the International Journal of Computer and Telecommunications. Vol. 55. Num. 9. 2011. Pag. 2303-2314
- *Accurate Resource Estimation for Generalized VoIP Sources*. Telecommunication Systems. Vol. 39. Num. 1. 2008. Pag. 37-50
- *Dimensioning Generalized Voip Sources in Wan Links*. IEEE Communications Letters. Vol. 11. Núm. 12. 2007. Pag. 1010-1012
- *Accurate Prediction of Voip Traffic Mean Bit Rate*. Electronics Letters. Vol. 41. Núm. 17. 2005. Pag. 985-987
- *A New Approach for Voip Traffic Characterization*. IEEE Communications Letters. Vol. 8. Núm. 10. 2004. Pag. 644-646
- *Background Noise Influence on Voip Traffic Profile*. Lecture Notes in Computer Science. Vol. 3311. 2004. Pag. 13-24
- *Optimal on-Demand Voip Quality in an H.323 Network*. Lecture Notes in Computer Science. Vol. 2720. 2003. Pag. 513-521
- *Packetization and Silence Influence on Voip Traffic Profiles*. Lecture Notes in Computer Science. Vol. 2899. 2003. Pag. 331-339
- *Parameters Affecting Qos in Voice Over Packet Networks*. Informatik. 2001. Pag. 5-10
- *Proposed Architectures for the Integration of H.323 and Qos Over IP Networks*. Lecture Notes in Computer Science. Vol. 2094. 2001. Pag. 549-558

4.2. Conference and Workshop papers co-author in:

- Adaptación del Simulador Opnet para Aplicaciones de Control Industrial con Tecnología 802.11. Actas de las IX Jornadas de Ingeniería Telemática 2010 (JITEL 2010). IX Jornadas de Ingeniería Telemática 2010 (JITEL 2010) (9). Num. 9. Valladolid. España. Universidad de Valladolid. 2010. Pag. 345-352
- Estudio del Impacto Energético del Códec en Aplicaciones Voip en Entornos Wifi. Actas de las IX Jornadas de Ingeniería Telemática 2010 (JITEL 2010). IX Jornadas de Ingeniería Telemática 2010 (JITEL 2010) (9). Num. 9. Valladolid. España. Universidad de Valladolid. 2010. Pag. 276-283
- Networked Control System: 802.11 Performance Analysis. Proceedings Control' 2010 9th Portuguese Conference on Automatic Control. Portuguese Conference on Automatic Control (9). Num. 9. Coimbra- Portugal. 2010. Pag. 1-6
- Mejoras en Opnet para el Dimensionamiento del Tráfico Agregado en Voip. Actas JITEL 2009. VIII Jornadas de Ingeniería Telemática. VIII Jornadas de Ingeniería Telemática. JITEL 2009 (8). Num. 8. Cartagena - España. Universidad Politécnica de Cartagena (Murcia). 2009. Pag. 15-17
- Proyecto Minerva: "Plataforma de Servicios en Movilidad - Cartuja'93". Libro de Ponencias de Mundo Internet 2009. XII Congreso Internacional de Internet y Sociedad de la Información (12). Num. 12. Virtual. Asociación de Usuarios de Internet. 2009. Pag. 1-12
- "Accurate Dimensioning of Voip Traffic". Opnetwork 2008 - Opnet Technologies Inc. Opnetwork Symposium (). Washington D.C. Opnet. 2008
- "Dimensioning Agregated Voice Traffic in Mpls". Ifip International Conference on Optical Network Design and Modelling (Ondm 2008). Ifip International Conference on Optical Network Design and Modelling (Ondm 2008) (). Vilanova I la Geltrú, España. Otro. 2008. Pag. 224-228
- "on the Reusability of User Interface Declarative Models". VI International Conference on Computer-Aide Design of User-Interfaces 2008. VI International Conference on Computer-Aide Design of User-Interfaces 2008 (6). Num. 6. Albacete, España. Otro. 2008. Pag. 313-318
- "un Sistema de Desarrollo de Interfaces Web Basado en Modelos para Aplicaciones de Gestión". Actas IX Congreso Internacional de Interacción Persona-Ordenador

- (Interaccion 2008). Congreso Internacional de Interacción Persona-Ordenador (Interaccion 2008) (9). Num. 9. Albacete, España. Otro. 2008. Pag. 313-318
- "Dimensioning Voice Traffic Trunks in Mpls". International Workshop in Gmpls. International Workshop in Gmpls (EntidadOrganizadora: Universidadgerona) (6). Num. 6. Gerona, España. Otro. 2007. Pag. 25-37
 - "Waine: Automatic Generator of Web Based Applications". Webist 2007 (EntidadOrganizadora: Icete). Webist 2007 (EntidadOrganizadora: Icete) (). Barcelona, España. Otro. 2007. Pag. 226-233
 - Proyecto Minerva: 'plataforma de Servicios en Movilidad - Cartuja93'. Actas de las Jornadas Telecom I+d 2007. XVII Jornadas Telecom I+d 2007 (). Valencia (España). Telecom I+d. 2007. Pag. 1-4
 - "Traffic Engineering Parameters for Vompls". V International Workshop in Gmpls Networks. International Workshop in Gmpls Networks (5). Num. 5. Gerona, España. Otro. 2006. Pag. 151-162
 - An Efficient Packetization Scheme for Voip. Proceedings of the International Conference on Signal Processing and Multimedia Applications. International Conference on Signal Processing and Multimedia Applications (). Setúbal, Portugal. Insticc (Institute for Systems and Technologies of Information, Control and Communication). 2006. Pag. 65-69
 - Traffic Trunk Parameters for Voice Transport Over Mpls. Proceedings of the International Conference on Signal Processing and Multimedia Applications. International Conference on Signal Processing and Multimedia Applications (). Setúbal, Portugal. Insticc (Institute for Systems and Technologies of Information, Control and Communication). 2006. Pag. 58-64
 - A Dynamic Web Programming Methodology to Measure the Impact of Subjective Factors. V Jornadas de Ingeniería Telemática (JITEL 2005). Jornadas de Ingeniería Telemática. Num. 3. Barcelona. 2005. Pag. 527-531
 - Optimal on-Demand Voip Quality in a H.323 Network. 6th IEEE International Conference on High Speed Networking and Multimedia Communication, Hsnmc 2003. 6th IEEE International Conference on High Speed Networking and Multimedia Communication, Hsnmc 2003 (6). Num. 6. Estoril, Portugal. Otro. 2003. Pag. 513-521
 - Packetization and Silence Influence on Voip Traffic Profile. First International Workshop on Multimedia Interactive Protocols and Systems, Mips 2003. First International Workshop on Multimedia Interactive Protocols and Systems, Mips 2003 (1). Num. 1. Nápoles, Italia. Otro. 2003. Pag. 331-339
 - On the Suitability of the e-Model to Voip Networks. 7th IEEE Symposium on Computer Communication (Iscc 2002). 7th IEEE Symposium on Computer Communication (Iscc 2002) (7). Num. 7. Taormina (Italia). Otro. 2002. Pag. 511-516

4.3. Research Projects

With Public Funds:

- Feedback Design For Wireless Networked Systems. (FEEDNETBACK) (European FP7)
- Modelado del Consumo de Recursos en Aplicaciones Multimedia de Tiempo Real (National, Spain)
- Modelado del Consumo de Recursos en Aplicaciones Multimedia Moviles (National, Spain)
- Sistema inteligente de ayuda a la toma de decisiones para el despliegue universal de servicios avanzados de telecomunicación (National, Andalucía, Spain)

Private research contact:

- Return channel for interactive application in Digital Television
- Next Generation Multimedia Network Design for Persan company

5. Teaching

5.1. Regular Courses at Master and Graduate (Telecomm. Engineering) Level include:

- Computer Network.
- Network Architecture
- Computer Architecture
- Local Area Network for Industrial Environment
- Mobile Communication (UMTS)

5.2. Ph.D. Theses Supervised

- Antonio Estepa (2004): Contributions to VoIP sources transmission
- Juan Jimenez (PhD Candidate. Defense expected in 2012): Support to energy efficient transmission for real time applications in 802.11 network

Seville, February 21st, 2012