

MATTHEW JOHNSON

Principal Systems Engineer

@ nosnhojm@icloud.com

+1-651-357-0569

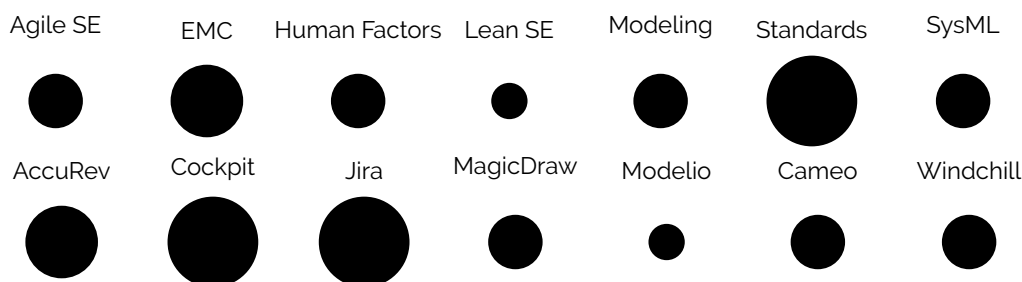
Lino Lakes, MN

www.nosnhojm.com

/in/nosnhojm

WHO AM I?

I am a Certified Systems Engineering Professional (CSEP) with over 15 years of experience designing complex medical systems. I have served as both a systems engineering technical lead and a systems engineering product owner for various medical devices and systems spanning cardiac rhythm management, cardiovascular interventions, peripheral interventions, and urology. My educational background was in electrical engineering (MS) and computer engineering (BS) with a focus on embedded software design, computer architecture, and semiconductor physics.



EXPERIENCE

02/19 – Present

Principal Systems Engineer

Boston Scientific, Cardiac Rhythm Management

Systems engineering technical lead for a urinary control system which consisted of an active implantable medical pump and urethral cuff, a patient handheld control unit, a clinician and patient mobile phone application, and a clinician website for patient management and device analysis. Responsible for technical planning, technical monitoring, needs elicitation, stakeholder and system requirements definition, system architecture and design definition, product line modeling, regulations and technical standards assessment, configuration and change management, and process definition.

Needs Elicitation / Requirements Definition / Architecture Modeling / Product Line Modeling / Configuration Management / Process Definition

03/17 – 02/19

Principal Systems Engineer

Boston Scientific, Interventional Cardiology

Systems engineering technical lead for a trans-aortic valve replacement (TAVR) delivery system and a rotational atherectomy system. Responsible for technical planning, technical monitoring, needs elicitation, stakeholder and system requirements definition, system architecture and design definition, product line modeling, regulations and technical standards assessment, configuration and change management, and process definition.

Needs Elicitation / Requirements Definition / Architecture Modeling / Product Line Modeling / Configuration Management / Process Definition

03/09 – 03/17

Principal Systems Engineer

Boston Scientific, Cardiac Rhythm Management

Systems engineering product/feature owner for a remote patient management system consisting of an active implantable medical device (implantable pacemaker, implantable cardioverter defibrillator, and cardiac re-synchronization therapy device), a patient home monitor, and a clinician website for patient monitoring and device analysis. Responsible for technical planning, technical monitoring, stakeholder and system requirements definition, system architecture and design definition, product line modeling, regulations and technical standards assessment, configuration and change management, and process definition.

Requirements Definition / Architecture Modeling / Product Line Modeling / Configuration Management / Process Definition

04/07 – 03/09	Senior Systems Engineer Systems engineering product/feature owner for a clinician programmer/recorder/monitor (PRM) system and a pacing system analyzer (PSA) system. Responsible for technical planning, technical monitoring, stakeholder and system requirements definition, system architecture and design definition, regulations and technical standards assessment, system integration, system verification & validation testing, and configuration and change management. Requirements Definition / System Integration / Verification & Validation / Configuration Management	Boston Scientific, Cardiac Rhythm Management
06/05 – 04/07	Systems Engineer II Systems engineer for an active implantable medical device (implantable pacemaker, implantable cardioverter defibrillator, and cardiac re-synchronization therapy device) system. Responsible for system integration and system verification & validation testing. System Integration / Verification & Validation	Boston Scientific, Cardiac Rhythm Management

EDUCATION

2005 – 2009	Master of Science in Electrical Engineering Summa Cum Laude	University of Minnesota, Twin Cities
2001 – 2005	Bachelor of Science in Computer Engineering Magna Cum Laude, Certificate in Semiconductor Physics	Rose-Hulman Institute of Technology

CERTIFICATIONS

CSEP	Certified Systems Engineering Professional International Council on Systems Engineering	INCOSE
------	---	---------------

AWARDS

2019	John Abele Science & Technology Award HeartLogic Heart Failure Diagnostic	Boston Scientific
------	---	--------------------------