# HFSS

**HFSS** is a commercial finite element method solver for electromagnetic structures from Ansys. The acronym stands for **high-frequency structure simulator**. HFSS is one of several commercial tools used for antenna design, and the design of complex radio frequency electronic circuit elements including filters, transmission lines, and packaging. It was originally developed by Professor Zoltan Cendes and his students at Carnegie Mellon University. Prof. Cendes and his brother Nicholas Cendes founded Ansoft and sold HFSS stand-alone under a 1989 marketing relationship with Hewlett-Packard, and bundled into Ansoft products.[1] In 1997 Hewlett-Packard acquired Optimization Systems Associates Inc. (OSA), a company John Bandler founded in 1983. HP's acquisition was driven by the HP's need for an optimization capability for HFSS.[2] After various business relationships over the period 1996–2006, HP (which became Agilent EEsof EDA division) and Ansoft went their separate ways:[3] Agilent with the critically acclaimed[4] FEM Element and Ansoft with their HFSS products, respectively. Ansoft was later acquired by Ansys.