

## **Biospectrogram Encodings**

- Indicator Encoding (E01.1.1/2/3/4 for A/C/G/T) (Vos, 1992)
- Tetrahedron Encoding (E01.2) (Silverman and Linsker, 1986)
- Z Curve Encoding (E01.3) (Zhang and Zhang, 1994)
- DV Curve Encoding (E01.4) (Zhang, 2009)
- Complex Encoding 1 (E02.1) (Anastassiou, 2001)
- Complex Encoding (User choice) (E02.2)
- Complex Encoding 2 (E02.3) (Rao and Shepherd, 2004)
- Random Complex Encoding (E02.4)
- Graphical Encoding 1 (E03.1) (Liao, 2005)
- Graphical Encoding 2 (E03.2) (Yau *et al.*, 2003)
- Random Graphical Encoding (E03.3)
- Quaternion Encoding 1 (E04.1) (Brodzik and Peters, 2005; Akhtar *et al.*, 2007)
- Quaternion Encoding 2 (E04.2) (Brodzik and Peters, 2005; Akhtar *et al.*, 2007)
- Real Value Encoding (E05.1) (Cristea, 2003; Rosen, 2006; Chakravarthy *et al.*, 2004)
- Real Value Encoding (User choice) (E05.2)
- Electro Ion encoding (E05.3) (Ning *et al.*, 2003)
- Random Real Value Encoding (E05.4)
- Quaternary Integer Mapping 1 (E06.1) (Dan Cristea, 2003)
- Quaternary Integer Mapping 2 (E06.2) (Dan Cristea, 2003)
- Protein Indicator Encoding  
(E07.1.1/2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17/18/19/20 for  
A/C/D/E/F/G/H/I/K/L/M/N/P/Q/R/S/T/V/W/Y)
- Protein Electro Ion Encoding (E07.2) (Vaidyanathan, 2005)
- Protein Real Value Encoding (User Choice) (E07.3)
- Protein Random Real Value Encoding (E07.4)

## **Biospectrogram Transformations**

- Fast Fourier Transform (T01)
- Hilbert Transform (T02)
- Z Transform (T03)
- Analytic Signal (T04)
- Discrete Haar Wavelet Transform (T05)
- Chirp Z Transform (T06)

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